

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

Vol. XII. No. 16.
WEEKLY.

BALTIMORE, NOVEMBER 26, 1887.

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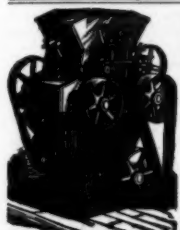
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When work began on the NEW CROTON AQUEDUCT, INGERSOLL "STRAIGHT LINE" AIR COMPRESSORS AND INGERSOLL DRILLS were adopted on about one-half the line. As the work progressed, the Engineer's Tables showed that the progress on the sections using INGERSOLL MACHINERY AVERAGED HIGHER THAN ALL OTHERS. This induced contractors on the other sections to put in INGERSOLL MACHINERY. Section "A," under Rodgers & Farrell, the first section north of Harlem River, was run for nearly a year with other machinery. In August, 1887, one half the section was equipped with INGERSOLL DRILLS, which were so satisfactory that ALL OTHER DRILLS were thrown out, and the section was completed February 3d, 1889, WITH INGERSOLL DRILLS EXCLUSIVELY. During the ten months prior to completion, THE MONTHLY RECORDS AVERAGED 22 FEET 8 INCHES IN ONE WEEK, AND 265 FEET, 6 INCHES MADE IN 26 DAYS, ALL FULL SECTION TUNNEL, 18,116 FEET. THIS IS THE BEST RECORD MADE IN FULL SECTION TUNNEL ON THE LINE. NATURE OF ROCK HARD GRANITE GNEISS.

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SEND FOR DESCRIPTION OF AQUEDUCT WITH ENGINEERS' TABLES OF PROGRESS AND CATALOGUE.

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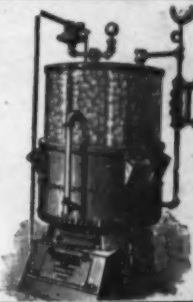
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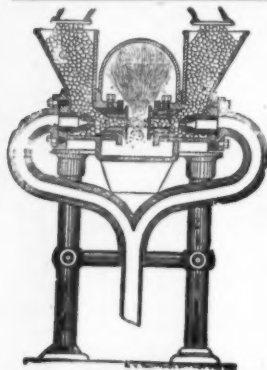
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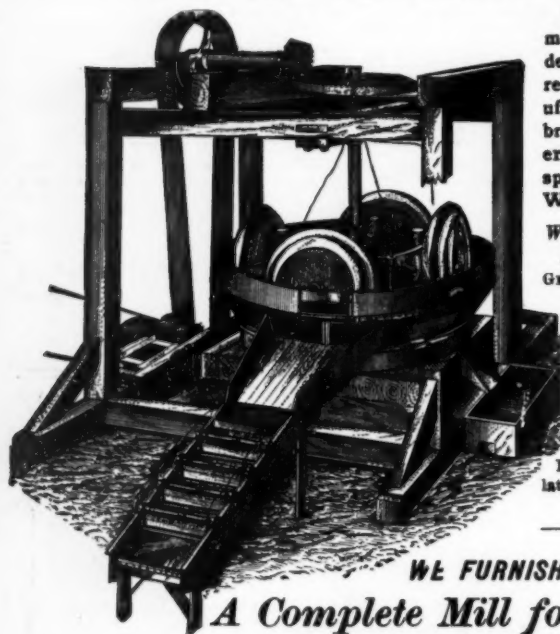


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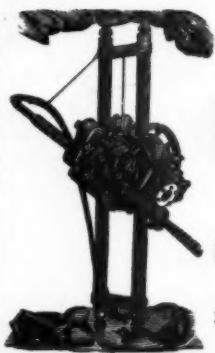
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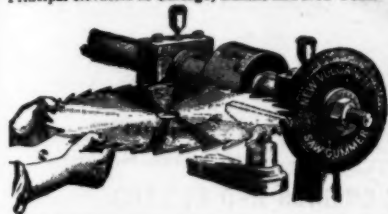
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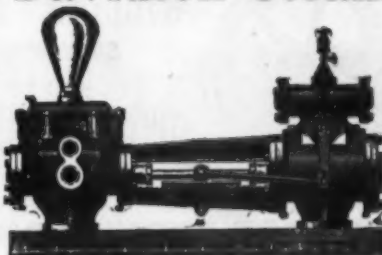
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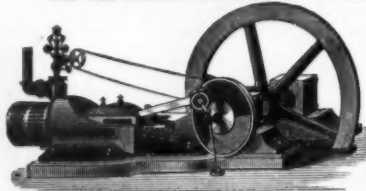
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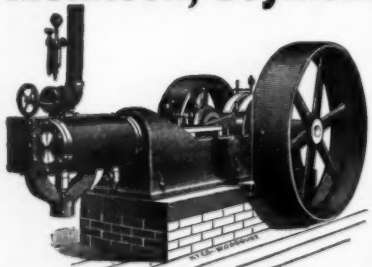
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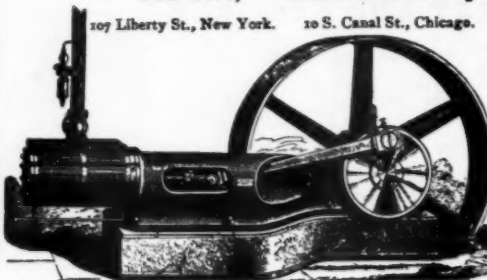
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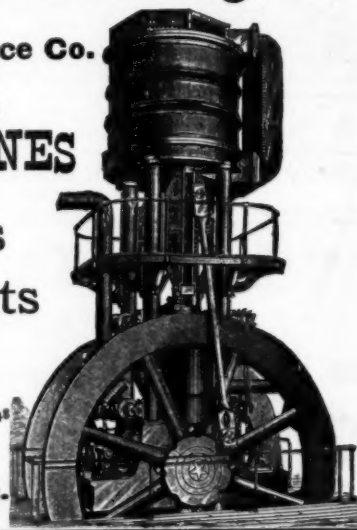
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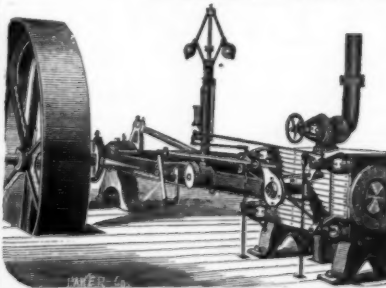
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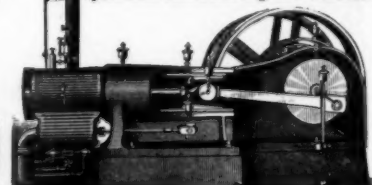
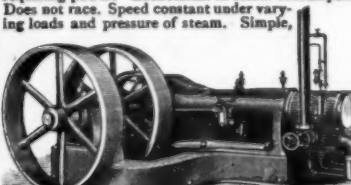
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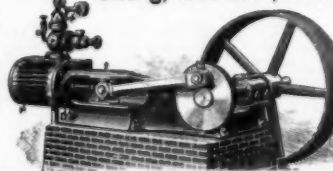
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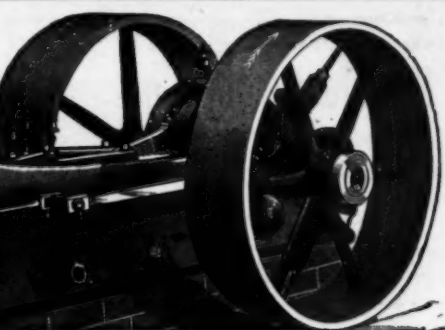
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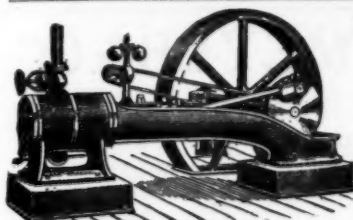
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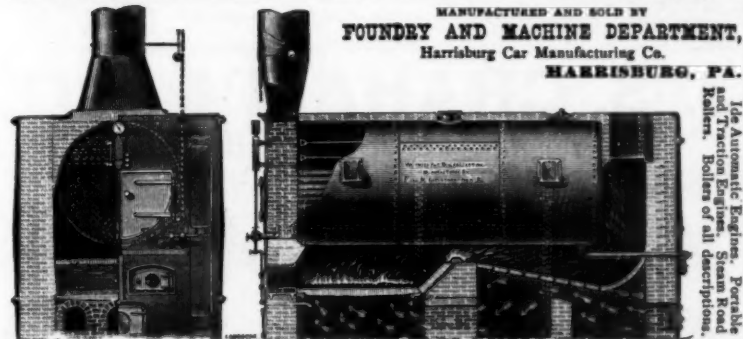
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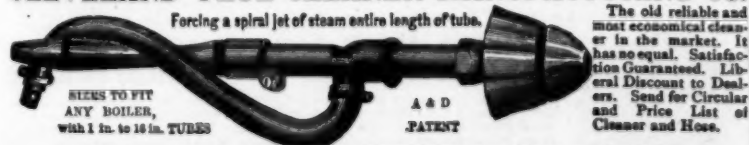
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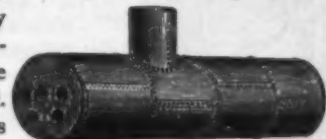
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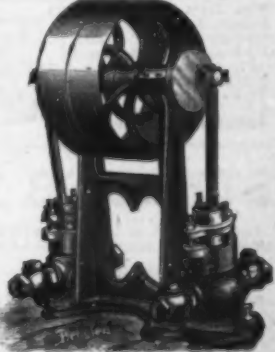
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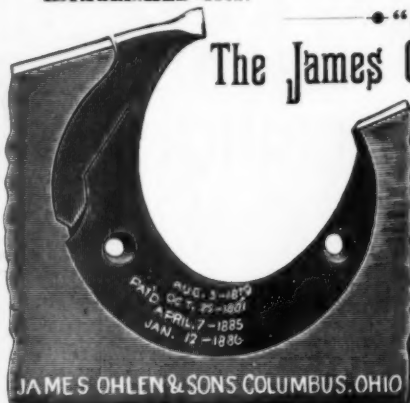
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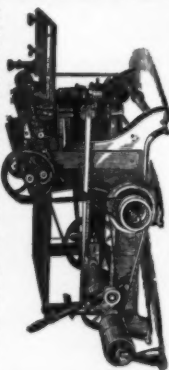
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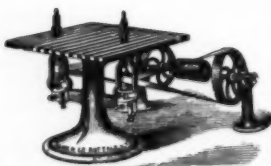
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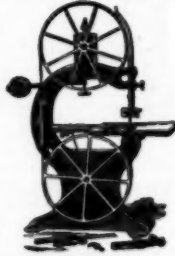
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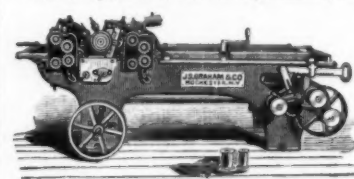
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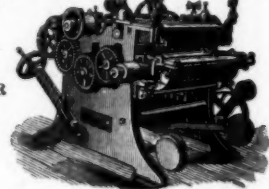
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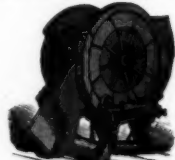


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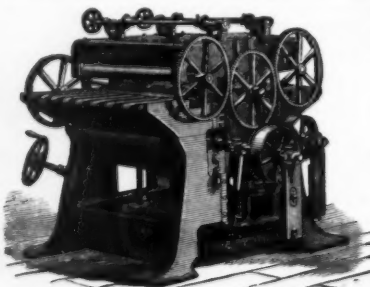
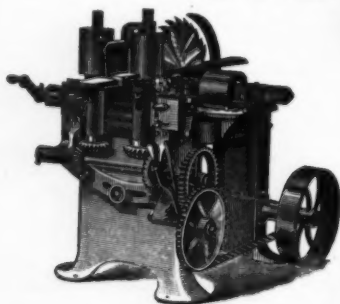
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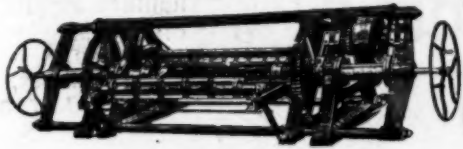


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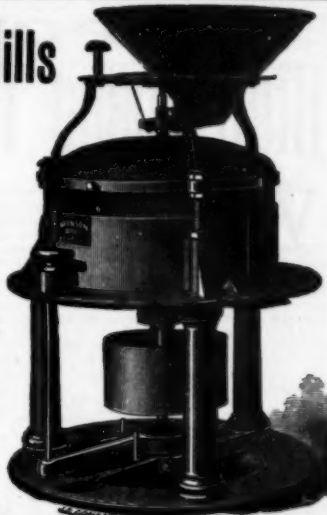
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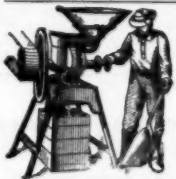
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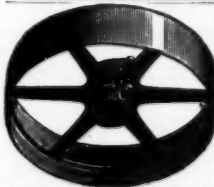


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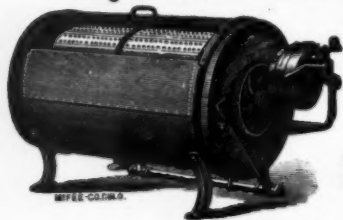
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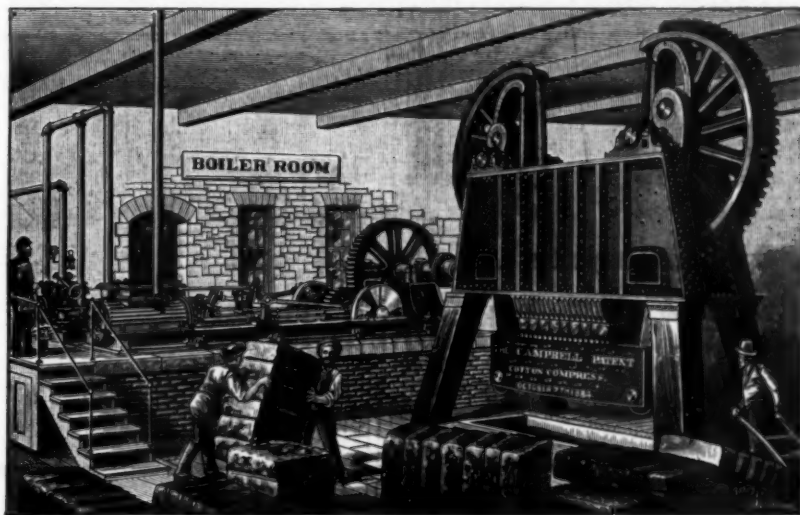


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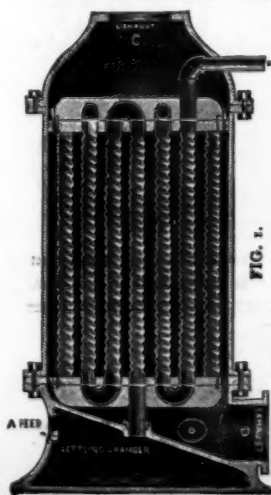
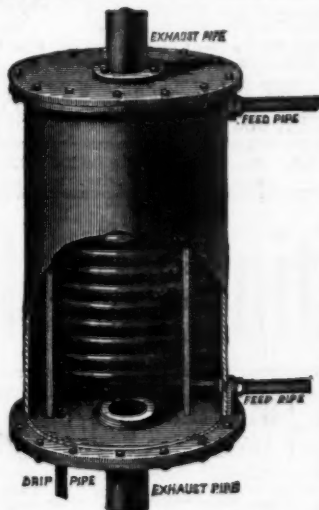
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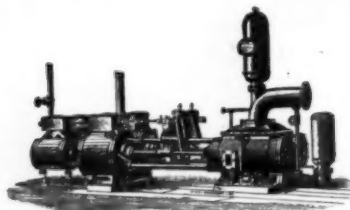
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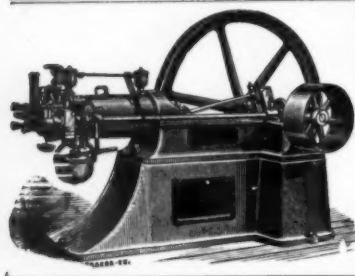
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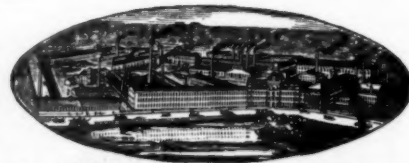
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Manufacturers' Record.

PUBLISHED EVERY SATURDAY BY THE
MANUFACTURERS' RECORD CO.

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"To the South, young man, and grow up with the country," is the standing advice to all young men who are seeking for occupations, homes and plenty. There is wealth.

That it is only necessary that the resources of the South should be personally investigated to convince even the most skeptical was illustrated in the visit of the United States Charcoal Iron Workers to Alabama last week. After a careful investigation Mr. J. C. Fuller, an extensive iron manufacturer of Pennsylvania, and President of the Association, in referring to the development of the mineral resources of Alabama, said:

"I have to-day witnessed what I have hitherto considered existed only in the imagination of the enthusiast. I have seen coal, ore and limestone in almost fabulous deposits in so close proximity to one another as to undoubtedly assure to Alabama the honor of becoming one of the foremost iron producing regions of the world."

In the same line is the testimony of Mr. Lewis Jones, formerly of Wheeling, W. Va., but now interested in the iron business at Bessemer, Ala. In an interview published in the Wheeling, W. Va., Register, in speaking of the future of the South's iron industries, he said:

"It is a great country for iron manufacture, but great as it is, we have seen but the commencement. I predict that in ten years from this time the territory from Chattanooga, Tenn., to Birmingham, will be the greatest iron-producing region in America. It cannot but be so, with the natural advantages it possesses. Why, we can turn out pig iron there at a cost of between \$8 and \$9 per ton, while the best you can do in Wheeling or Pittsburg is about \$17. I have seen ore laid down at a furnace at a cost of eighty-four cents a ton. Think of the profit that means, at present prices. What we call the 'Wheeling Company' at Birmingham,—the one Messrs. Vance, Woodward, Campbell and others are interested in, was started on a capital stock of about \$500,000. I suppose they now have \$2,500,000 or \$3,000,000 invested. All that money has been made. Our big advantage is in the raw material, and not in 'cheap labor,' as is generally supposed. Coal, iron ore and limestone lie right together at the doors of the furnaces."

It is a noteworthy fact that instead of visitors to the South being disappointed in not finding the advantages of that section and its growth as great as they had been led to believe, they find that not one-half has been told. We have yet to learn of the capitalist seeking investments in the South or the manufacturer looking for a desirable location there who is not astonished at the boundless possibilities that await this Sunny Southland, "Creation's Garden Spot."

Which?

Are Mr. J. S. Moore, the free-trade writer in the New York Times and the editor who publishes his trash stupidly ignorant of business or are they simply knowingly trying to misrepresent and deceive? We cannot see how it is possible to avoid either one conclusion or the other. In a late issue of the Times Mr. Moore says:

From official statistics during the census year of 1880 (when labor was paid higher than it is now) the whole amount of woollen fabrics manufactured, exclusive of worsted goods, was \$160,606,721. The cost of all material used in producing the above was \$100,845,611. Now if we deduct the cost of the material from the value of product we get a net surplus of \$59,761,110.

The surplus was thus divided:

Total amount paid for labor.....\$45,836,922
Net profit to capital invested.....33,924,818

Total.....\$59,761,110

The hands employed during the year 1880 were:

Males above 16 years old.....46,978
Females above 15 years old.....29,372
Children.....10,151

Total.....86,504

These hands got, as I stated, \$25,836,292 wages, which is, on an average, a little less than \$300 per year, and, altogether, very good wages. Now let us see what wages the capital made out of a protection of 67.29 per cent. Well, then, the total capital invested, as given by the manufacturers, which we may feel assured was not underestimated, is given as \$96,095,564. This amount of capital earned in 1880 \$33,924,818, or a trifle over 35 per cent.

Is it possible to imagine anything more utterly absurd than this old, oft repeated and often disproved protection falsehood? In the manufacture of woollen goods the total value of the products in 1880 was \$160,606,721, the amount paid for raw materials was \$100,845,611 and the aggregate of wages was \$25,836,262, a total of the last two of \$126,681,873. Deducting the cost of raw material and the wages paid from the total value of the product leaves \$33,924,818 which Mr. Moore claims was the net profit to the capital invested, or 35 per cent. net profit on the total capital of \$96,095,564. According to this brilliant statistical genius there are only two items of expense in manufacturing—the cost of raw materials and labor; it costs nothing to run the business, there is no depreciation in the value of buildings; if owned, and machinery, and no rent if leased, no expenses for fuel, nor light, no freights, no cost for selling goods, no bad debts, no travelling expenses, nothing for the work of the owners of these woollen mills. Here is the great inventor,—the only one worthy of the name—the one who has invented a way by which all that a manufacturer has to do is to buy his raw materials and pay his laborers. All the rest is clear profit. It is no longer necessary to worry over bad debts, over depreciating machinery, over the thousand and one expenses incidental to business. Pay for your raw material and your wages and all the balance, gentlemen, you fortunate manufacturers, is net profit. Mr. Moore says so, and surely he ought

to know. The New York Times endorses such stuff and surely the Times ought to know.

Of such trash as this is the sum and substance of free-trade writings made up. Surely it must be a weak cause when its brilliant advocate—and brilliant he must be, for don't the free-trade papers say so, and hasn't he been the chief free-trade writer for the Times for 10! these many years—can find no more substantial argument than this in its favor.

Birmingham's Great Progress.

The Age, of Birmingham, Ala., issued a special edition on November 13, showing up the wonderful growth of that wonderful town, as well as of many of the other thriving industrial centers of Alabama. With \$31,000,000 of capital invested in business, Birmingham had during the last twelve months, according to Dunn's Commercial Agency, only four failures with aggregate liabilities of but \$50,000 and \$20,000 of assets. If any proof of the soundness of Birmingham's business growth was needed, it is surely found in this remarkable statement. The buildings actually erected during the year or now under construction in Birmingham number nearly 1,900, costing, according to the actual figures of the architects, over \$4,400,000.

The Age is certainly justified when, in referring to the remarkable exhibit made in its columns, it says: "Birmingham surprises and confounds the statistician who attempts to collect and collate the details of her progress, as well as staggers the credulity of those who stop to listen to the story of her growth."

Take the unvarnished facts given: Is it not a brilliant record for what was a few years ago one of the poorest regions of an impoverished cotton State? Isn't it glory enough for Birmingham? Can any one say there is bound or limit to such growth? With elements of commercial prosperity as solid and enduring as the granite and the iron in the hills environing the beautiful valley of which Birmingham is the center, we say that the undeniable facts we present here sweep away all doubt of the ultimate supremacy of this region of Alabama as the iron manufacturing center of the United States. It will not only be in the making of pig iron, but it is bound to be in all that consumes the pig, and it is assured to be in the manufacturing of steel and all that consumes the steel."

Birmingham's prosperity means the prosperity of all Alabama.

GEO. M. PULLMAN, of the Pullman Palace Car Co., and other capitalists, representing in the aggregate, it is said, over \$200,000,000, were in Alabama last week investigating the advantages of that State with a view to investing. The Pullman Company, it is claimed, will establish branch works at some point in the South.

A Forcible Illustration of Southern Progress.

In this week's issue of the MANUFACTURERS' RECORD our general Southern correspondent tells of Anniston and its wonderful development.

Hon. Wm. D. Kelley, the great Pennsylvania statesman, in his series of letters on the South, written for the MANUFACTURERS' RECORD, devoted one entire letter to this town under the head of "Anniston; A Romance of the New South." In this letter he gave an enthusiastic description of the growth of Anniston, widely known as "The Model City of the South," of its development and its marvelous mineral wealth. Judge Kelley declared that Anniston is an "ideal industrial center," and said that "it is in many respects the most remarkable center of the iron industry in the Southern States."

Anniston is beautifully located in the Alabama mountains. It is surrounded by marvelous mineral resources, by vast forests of virgin timber and a magnificent farming country. There are twelve furnaces in the "Anniston iron district," (two of them making the celebrated "Woodstock iron," being within the city limits, and two more, to make coke iron, being under construction.) Anniston has three banks, splendid schools, fine churches, an opera house, one of the largest cotton mills in the South, immense car wheel and car axle works, car works, the only steel blooming in the State, lately completed, rolling mill, cotton compress, machine shops and foundries, planing mills, immense fire-brick works, etc., and is now building two coke furnaces to turn out 2,000 tons of iron a week; iron pipe works, to employ 900 hands, &c.

Over 100,000 acres of splendid iron ore, timber and coal lands in Alabama, including the great Cahaba coal and iron property of 30,000 acres of excellent coking coals, are owned by Anniston capitalists, and are being developed in the interest of this town. It is the boast of Anniston, and it is well worthy of boasting over, that these coal and iron properties, the furnaces, old and new; the pipe works, the cotton mill, the car works, the railroads to develop these properties, etc., have all been paid for in cash, there being no debts or bonds to encumber these great enterprises. This is a remarkable testimony to the absolute soundness of this great industrial development. There are good openings in Anniston for many industries, large and small, such as cotton and woolen mills, foundries and machine shops, chain works, agricultural implement factories, wood-working establishments of all kinds, brick and tile works, etc.

ANNISTON, Decatur, Sheffield and other Alabama towns, are crying for contractors to come and build houses. There is a fine opening in these places for capitalists to make 25 per cent. or more in building houses for sale or rent.

A GOOD many Northern and Western papers are doing their best to prevent the flow of capital to the South. "It is all a wild speculative land craze which must certainly collapse" they claim, but despite their ravings the South moves steadily on. Day after day adds to the list of new enterprises, and while the South is building rapidly, it is building solidly and surely. Because in Birmingham, a prosperous city of 40,000 people, where six years ago there were 4,000; and in Anniston, "The Model City," where population has doubled in one year, and where enough new enterprises are under construction to employ 4,000 additional mechanics; in Decatur and in other growing towns, land is much higher than when these places were mere villages, some of our Northern friends profess to fear a great collapse. They are wrong. The South is marching on to victory in the industrial line, and Anniston, Birmingham, Decatur and other towns will continue their wonderful growth for generations to come.

UNDER the simple title of "Tuskaloosa, Ala.," the Tuskaloosa Coal, Iron & Land Co., have issued an attractive pamphlet setting forth the many advantages of that place "as a manufacturing point, and as a place of residence and the facts that make it the Pittsburgh of the South." One cannot read this instructive pamphlet without being impressed with the great future that is before this admirably located town. Already a place of much importance, having 6,000 inhabitants, it is destined to become one of the leading industrial centers of the South. It possesses the strong points of having a splendid agricultural country on one side, great mineral and timber wealth on the other and added to these direct water transportation to the Gulf.

BIG STONE GAP, the meeting point on the dividing line between Virginia and Kentucky, where the Louisville & Nashville, the Norfolk & Western, and several other railroads will concentrate next spring, is booming. The Louisville & Nashville have taken an option on some 60 acres of land, where the town is to be, for \$32,000, and the Norfolk & Western has also, it is said, bought heavily. The latter road now has 4,500 hands at work on their extension from Bristol to Big Stone Gap.

MR. D. G. EDWARDS, President of the American Composition Fuel Co., Cincinnati, Ohio, writes us that he is using large quantities of powdered charcoal, and also powdered coke, and paying a pretty heavy price for the former, owing to the fact that there are very few firms that he can find that handle it in quantities. Mr. Edwards desires the address of those who handle powdered charcoal, and advertises to that effect in this issue.

WE regret very much to say it, but the administration of the Postoffice Department during the last two years has certainly not been very satisfactory to the country. If one half of the energy devoted to the ferreting out of obscure and unheard-of laws, and of putting strained interpretations upon others, all of which have been against rather than in favor of public convenience, had been given to the safe and expeditious handling of mail matter, far more good would have been accomplished. Judged by our own experience, there has not been a period for many years in which so many mistakes have been made, and in which complaints of irregularities have been more numerous throughout the whole country, than during the last year or two; and, as though not satisfied with this condition of affairs, the department at Washington seems to be devoting its time quite largely to seeing how much inconvenience can be caused to business men by absurd and strained interpretations of laws previously unheard of. The latest absurdity in this line is that which says that nothing but the address of the sender can be printed on an envelope used for sending out a circular. For instance, if John Smith wants to send out a hundred circulars, he can have printed on his envelopes "John Smith, Baltimore," but if he puts "John Smith, Blacksmith, Baltimore," his circulars would not be forwarded. The department excuses itself on the ground that this is an old law not heretofore enforced. As we have already said, if the same energy used in hunting up such obscure laws was given to preventing delays and irregularities, the general public, for whose good, it has been supposed, the postoffice is run, would be much better satisfied.

"SUCH an era of industrial enterprise and prosperity has never been known in this section," writes Mr. O. C. King, of Morristown, Tenn., to the MANUFACTURERS' RECORD. This shows what persistent work can do. For a year or more Mr. King and a few others labored unceasingly to make known the advantages of Morristown, publishing quite a number of letters in the MANUFACTURERS' RECORD about that section and its resources before any decided improvement was visible. Gradually, however, the good work commenced to tell and now Morristown is developing very rapidly.

THE address of Gov. J. Proctor Knott at the last annual commencement of the Agricultural & Mechanical College, of Kentucky, on Kentucky and its resources has been published in pamphlet form. It contains a vast amount of information about that richly endowed State, and now that Kentucky is beginning to attract so much attention this address will prove of great value, presenting as it does the wonderful advantages of that State for the manufacturer and the capitalist.

American Ships for American Commerce.

Two events of great importance to American commerce have occurred within a fortnight. The first was the three days' convention of the Gulf Department of the American Shipping and Industrial League at Birmingham, Alabama; the other, the publication of the annual report of the Admiral of the Navy. The one was a patriotic assemblage of influential men of all parties for the purpose of giving impetus to the popular movement now under way for reviving our American Merchant Marine. The other gave in terse official language the most cogent reasons why this should be speedily and thoroughly done. This report comes opportunely to substantiate and enforce the action of the convention, for the Admiral of the Navy presents from the standpoint of his high office the same cogent reasons for early and effective aid to American ships that were advanced by the statesmen and practical merchants who addressed the convention.

Birmingham, the "Magic City," is inland. Her furnaces and factories are in no danger from a maritime foe. In case of war no foreign forces could ever reach her gates. Her industries would be safe and her homes secure. The iron highways over which her products are carried to market would not be endangered. Yet Birmingham was intensely interested in the deliberations of the league, and manifested it by an unstinted and gracious hospitality. Many other inland communities had their accredited representatives, and some of the upper Mississippi States sent delegations carrying greetings and sympathy. It is not overstating in the least to say that no commercial assemblage has met during the present generation in which there was more individual talent or whose deliberations were more earnest and harmonious. One dominant thought and purpose was apparent from the beginning to the close of the deliberations. The American Merchant Marine shall be re-established. American Commerce shall again go in American ships. This was the theme of every speech, and the declaration embodied in the resolutions unanimously adopted. The addresses made were of an unusually high order; as a whole they made a complete history of the rise and decline of the American marine presented from every side of the subject. The key-note was struck by Hon. N. D. Wallace, of New Orleans, who, in accepting the chairmanship of the convention, said:

"Unless we seek the opportunities of extended trade we shall never find them. We must hunt the world these days,—the world never comes to us,—and to do so we must ask, demand if necessary, aid—material aid, from this rich and powerful government. It has fostered railroads to the extent of millions of dollars, and has thereby built up an enormous interior business. Why should it not aid us in our foreign trade?"

The great event of the first day was the oration of Senator Morgan of Alabama. His portrayal of the needs of American commerce and of the imperative necessity of a merchant marine fostered by government that should facilitate its expansion, and at the same time provide the country with a body of skilled seamen to serve in its navy in case of war, evinced a profound knowledge of the subject and gave assurance that when this subject is under consideration in the United States Senate, the Senator from Alabama will be one of its most earnest and intelligent advocates. The addresses of Captain Ambrose Snow of New York, and Senator W. C. Whitthorne, of Tennessee, made the first session of the second day, were each of marked importance. Captain Snow has had a lifelong experience as sailor, master and ship owner, and always gives to his hearers the logic of hard facts. His address was practical

and delighted his audience, few of whom had ever heard an old sailor "speak in meeting." Senator Whitthorne made an off-hand argument in favor of the restoration of American shipping that was unanswerable. He finished by showing that with the decline of the merchant marine began the fall of the navy. Many other speeches were made, notably one by Col. Chas. E. Hooker, M. C., of Mississippi, whose eloquence and brilliant rhetoric illuminate every cause he espouses. There were two speakers whose remarks ought to have wide spread publicity. One was by Hon. Chas. E. Hogg, M. C., of West Virginia, the other by Col. Chas. S. Hill, national secretary of the league. The first was the most complete consecutive history of the

When stopped, all expense ceases.

Engine Doing the same Work.

Being Recommended by Insurance companies, statistics of the transportation of our agricultural products and of the losses experienced by American farmers and by the country at large because of their carriage in foreign ships was a new and forcible method of presenting the subject. By this method he demonstrated that of the farm products sent abroad in 1886, 69 1/2 per cent. were furnished by the interior States and territories, and that consequently their farmers had a vital interest in the rehabilitation of American shipping. Colonel Hill took for his text, "the farmers' interest in shipping," and in straightforward, plain, common sense style, proved that no other class of citizens has more at stake than they.

The Herald, of Birmingham, with commendable enterprise, furnished its readers with daily verbatim reports of the addresses. We hope the league will have them reprinted in pamphlet form and give them a wide circulation, for addresses so filled with facts, gathered in every field of investigation, are valuable contributions to our economic literature and should be put in form for preservation and reference. Before adjournment the convention adopted a resolution urging Congress to enact the "tonnage bill," prefacing it with the following preamble and resolution: "The Convention of the Department of the Gulf Coast of the American Shipping and Industrial League, assembled in the city of Birmingham, Ala., recognizing that the great object of the League is to promote the development and distribution of products of American labor by the restoration and extension of the merchant marine of the United States, thereby establishing intimate commercial intercourse with other countries; and, feeling the imperative need for outlets for the productions of mine and farm of the States constituting this department; and, recognizing further, the necessity created by the astonishing developments in mining and manufacturing within our borders, thereby creating an imperative necessity for markets outside of the United States; and recognizing also our inability to compete at this time with the manufacturing establishments of the older countries, which have the advantage of us in money and in skilled labor, unless we can have increased and cheapened facilities in the carriage of such productions, together with the freights to be earned by us in their transportation in American bottoms, this convention declares, that whilst an increase of our merchant marine is demanded by patriotic considerations in the interest of our whole country, it is absolutely necessary to prevent the glutting and stagnation of every branch of trade and industry in the South; therefore be it

Resolved—1st. That the rapidly developing industries of the Gulf States in the mining of coal and iron and in the manufacture of cotton goods, make the demand for new outlets and increased facilities of transportation imperatively necessary. The proximity of the gulf ports of our Southern States to the various Spanish and Portuguese-American countries gives the United States a decided advantage over all foreign countries in point of distance and time for the supply of provisions, breadstuffs and other products of the great Mississippi valley and the region tributary thereto, of which said countries are large consumers, and which, for want of a properly sustained merchant marine, are now supplied to a great extent from foreign countries. This need the general government should satisfy, and in doing so the benefits would be distributed to every portion of our common country."

ANNISTON, ALA.

A Manufacturing Center in the High-lands of North Alabama.

Iron Interests, Manufactories and Other Industries.

Homes for the Thrifty Farmer and the Skilled Mechanic.

Prosperity in the Valleys and Wealth in the Hills.

[Special correspondence MANUFACTURERS' RECORD.]

ANNISTON INN,
ANNISTON, ALA., Nov. 14, 1887.

"To the South, young man, and grow up with the country," is the standing advice to all young men who are seeking for occupations, homes and plenty. There is wealth for everybody under our blue skies in the new era of prosperity that has opened upon the sunny South.

In 1790 the center of population of the United States was in Maryland, on the 39th parallel, and at every new census it has moved westward. By the next census it will, in all

society, from churches and from the consuming markets of the country. They cleared the wilderness and built villages that grew into towns and then into mighty cities. To-day the South offers to the thrifty home-seeker every advantage that the West did in former years, and adds to all this the arts and comforts of the highest civilization, good society, a more genial climate, greater healthfulness and proximity to markets, for all that can be produced whether by the farmer or the manufacturer.

The Southern man is demonstrating that this land is the Canaan toward which the tide of enterprise must set. The materials that hold the first rank in mechanical industries are more abundant and more accessible here than anywhere else in the world. The mechanical ingenuity must come where the material is. The prairies of the West will no longer monopolize the moving population. To the South must come the brain and the muscle and the capital. The finger of nature points to the South as the country where the most important mechanical developments will occur during the remainder of the present century. The South is happy and hopeful in the great change that has come over her. Her people are confident that their prosperity is on a foundation as

TURNERS' RECORD, in which already much space has been given to it.

It is an iron center that makes possible the production of iron at the minimum of cost, as it has every requisite for iron in superabundance, and all attainable at the furnace with the least outlay. So much for its natural location in the production of iron. Nature here has placed the ore everywhere in the soil. Within the very sight of the smoke-stacks of the great furnaces nature has left her riches on the surface, and for a dozen years the "everlasting hills" encircling the city have furnished for her furnaces ore which, judged by the quality of the iron produced, is not surpassed in the South, and for generations to come these hills will continue to furnish this ore.

Lying on either side of the Blue Ridge Mountains are long stretches of fertile valleys—the Choccoloco and the Alexandria—each extending for nearly 30 miles, affording the most advantageous means for profitable farming. For within these rich and fertile valleys, the great Deltas as it were of this portion of the Blue Ridge, where the red man for years tilled the soil in a primitive way, the earth yielded bountifully. Here to-day is a land awaiting the industrious settler who may come, and by a little fore-

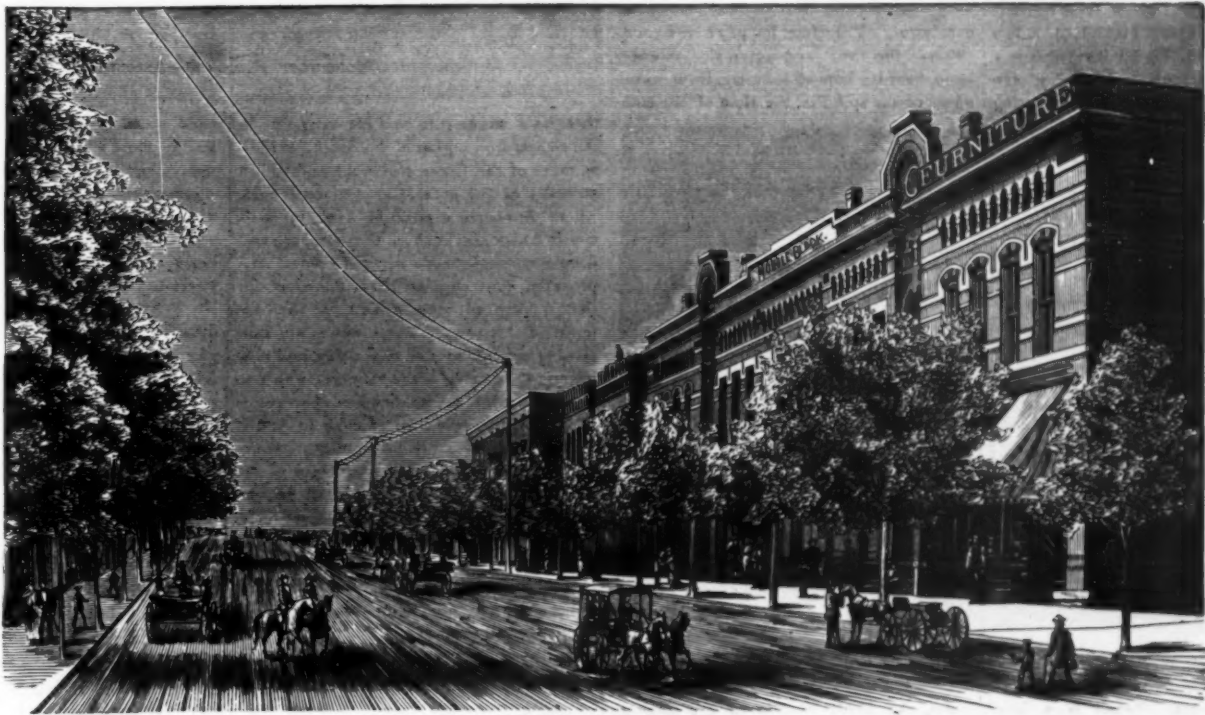
healthy climate, and pure streams of cool crystal water.

As to her railroad facilities.—The East Tennessee, Virginia & Georgia places her in connection with Montgomery and Selma southward, and Rome, Chattanooga and Knoxville northeast; the Georgia Pacific to Atlanta east, and Birmingham west; the A. & A. connecting with the Georgia Central southeast. In the near future the steel rails will give her the Montgomery & Chattanooga, the East Alabama & Cincinnati and the Anniston & Gadsden Railroads.

As to her manufactures.—Here are in full operation four 50-ton iron furnaces, with two more nearly ready for operation, with a capacity of 2,000 tons per week, a rolling mill, a car wheel foundry, two machine shops, a car factory, a large cotton factory, cotton compress, a number of planing mills, ice factory, water works, electric light plant, besides a number of minor enterprises.

As to her commercial facilities.—She is situated in the heart of the great cotton belt, and, being the center of an important railway system, her commercial facilities equal those of any Southern city.

An ideal city, not in name, but in reality is Anniston. The stranger leaving the cars to wend his way up town will be forcibly struck



NOBLE STREET—ANNISTON.

human probability, have commenced to move southward.

The trend of industry and population is already this way. From the North and from the West the tide of emigration to the South is gradually swelling. Thousands are leaving those sections for the South; some to escape the severity of the long winters and enjoy the blessings of a genial climate, which in winter and summer alike, is vastly superior to that of any other part of this great country; some to improve the unequalled opportunities that this fair land offers for business of all kinds—manufacturing, merchandising or farming. Here are found all the advantages and attractions of the most favored countries, centered in one. Here is a matchless climate, the most wonderful mineral wealth of the world, timber resources that are almost boundless in their extent, a splendid farming country yielding to the careful tiller of the soil better returns than any other section of the United States, good schools, churches everywhere, a hospitable people ever ready to extend a warm welcome to the stranger. But a few years ago, when the hurrying throngs of emigrants from the East and from the Old World moved westward, they left civilization and all its comforts behind to build themselves homes, away from

firm as her mountains of iron. The new growth has only begun. Where there is now one mill there will in but a few years be a hundred. And who shall set a limit to the industrial achievements of the South! Her field is the world. A region that produces the necessities of life with the smallest expenditure of labor and capital need fear no financial storm. The new and progressive towns of the South are examples of this truth. There is one in particular which I may recall in substantiation of my remarks, and it is

ANNISTON IN NORTH ALABAMA.

Gentle reader have you been to Anniston? If not, and you are desirous of seeing a thoroughly progressive town in the South, a place built upon the surest and most practical foundations of order, system and progress, then by all means on your "way down South" stop over at Anniston, see for yourself and be convinced that this beautiful, romantic, orderly and progressive city of the New South, of which so much has been written, is not a myth, but a reality; a monument to skill, enterprise and industry; an industrial center of such growth and magnitude that it would be an utter impossibility to do it credit by an article, or even a series of articles in the MANUFACTURERS'

sight and expenditure of time and money, reap abundant harvests. These lands, within a radius of a few miles of the city, will yield nearly every product known to man.

Is it therefore a puzzle difficult to solve why Anniston was selected as a site for a city, or why in the nature of existing facts it has moved forward with such broad and deep furrows of progress, building up in measures and methods which secure life and prosperity, furtherance and advancement in a gradual and enduring line to challenge the wonder and admiration of the present generation.

LOCATION.

The location of this wonderful iron center is pretty generally known. Situated on the eastern edge of the great limestone formation or rather on the dividing line between the lime and the granite in Calhoun county, Ala., is this progressive city of the New South, 134 miles northeast of Selma, 104 miles west of Atlanta and 65 miles east of Birmingham.

What of Anniston asks the careful reader and inquirer.

As to her resources.—Here are to be found vast mines of brown hematite ores, immense quarries of limestone, rich and complex variety of timber, equable, pleasant and

with progress on one hand, energy and push on the other, while before him lies system and order in all the channels of trade and commerce. Remark an English traveler in company with your representative, "this is indeed a model city with a true basis of trade and a high conception of the just laws of supply and demand; a thoroughly live and wide awake place, where all the elements of push and activity are happily blended and where one finds a future full of promise and hope." This gentleman was right in his predictions. A beautiful panorama is this city of Anniston. Surrounded by the great walls of nature, protected from the blasts of winter and the hot noonday sun of summer, here is an ideal spot for the tourist as well as for the health-seeker. Anniston is not a place of mere smoke-stacks, or of furnaces or workshops. It is a garden spot amid the everlasting hills looming up in the distance. Handsome cottages, beautiful lawns, elegant shrubbery, greet the eye everywhere around. Over there the comfortable and neat homes of the daily toilers; in the opposite direction the handsome and elegant mansions of the capitalists. Here the substantial school houses and there the imposing temples of worship. Wide and uniform streets, pavements being put in first-class order, shade trees embellish.

ing the daily walk of the pedestrian, and a due sense of the eternal fitness of things in a sanitary point of view really make this spot a desirable place either to visit or to live in. Socially it is a dream of paradise—no conflicting elements—the daily toilers are happy and contented in their own tasty homes amid the sanctity of their own fire-sides and in the prosecution of their labors, the merchants and the manufacturers, the capitalists and the investors have to themselves their individual comforts and pleasures, and thus the men of the homespun and the men of the purple dwell in peace and unity. There is no conflict here between labor and capital. Reciprocal interests is the lever, contentment, peace and unity the just balance, making Anniston the ideal home place, for which it was originally intended by the wise foresight, the judicious care and the humane motive of the two men who gave it birth—Messrs. Tyler and Noble—men to whom the present, as well as the future, generations will render thanks long after Anniston has assumed that proud position in the galaxy of cities in the Western hemisphere to which she is destined.

What of the industrial outlook naturally asks the reader who has heard so much of this wonderful Alabama town. To the facts pertinent and startling. Fifteen years ago this place was the camping ground of a few prospective settlers. To-day it rejoices in a population of 9,000 souls, and is one of the leading iron-producing and manufacturing

evidence of substantial progress, when it is taken into consideration that only a few years ago Anniston was a field of wild grasses and a place of dreary solitude? But the developing period, the continued growth of this place is never at a standstill. The natural advantages, both of soil and climate unfold to the men of foresight and capital greater and better channels of industrial enterprise than has yet been inaugurated. Take the outlook of to-day, and observe what has been accomplished during the past six months:

Woodstock Iron Co's two new furnaces...	\$ 500,000
Anniston Pipe Works.....	300,000
Anniston Car Wheel Works (new addition).....	100,000
Anniston Bloomery.....	50,000
Anniston Compress.....	100,000
Anniston Fire Brick Works.....	25,000
Anniston & Cincinnati Railroad.....	1,000,000
Anniston Street Railway.....	100,000
Street improvements.....	25,000
New churches.....	40,000
New city hall.....	20,000
Union depot.....	75,000
Private residences.....	150,000
Business houses.....	100,000
Boys school building.....	15,000

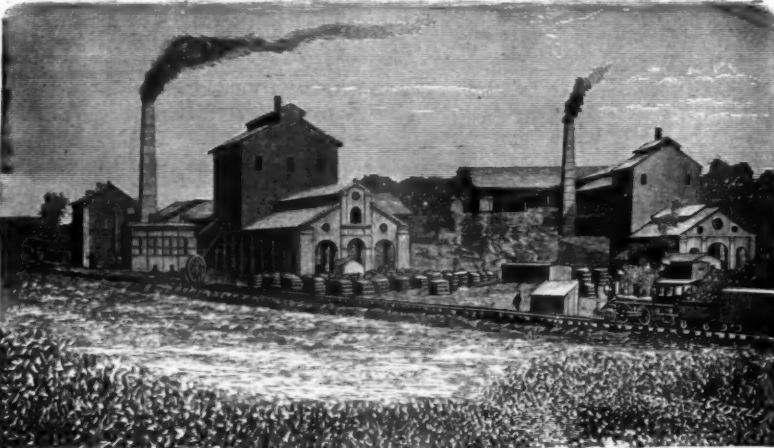
Is evidence wanting in the above tables to show the public spirit, indomitable pluck and vital energy of the people of this place? Surely here is tangible proof that much has been done and yet there is room for much more to be done. Figures while they don't lie, can give but cold affirmation of the facts, but ocular demonstration is proof conclusive. Therefore, happen here in mid-day, see the thrift and enterprise on every hand, hear the hum of industry, listen to the music of the spindles, the thud of the com-

ways, is too grand a revolution to be measured by the mere dollar test.

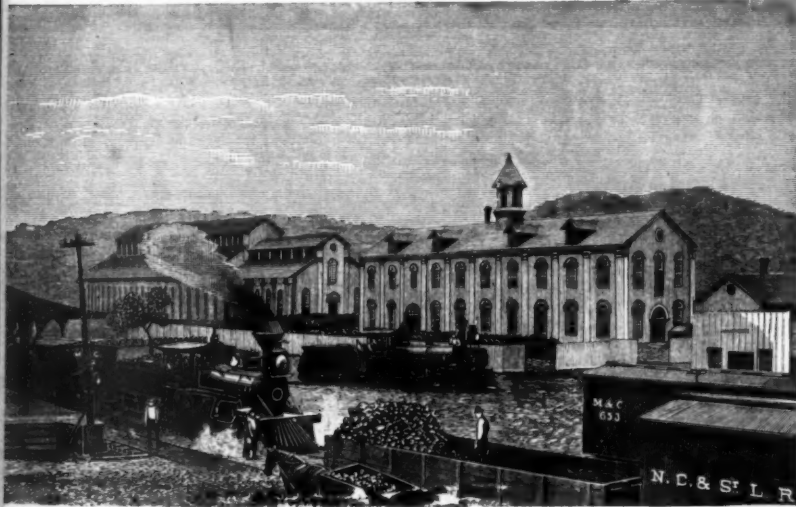
NATURAL ADVANTAGES.

"To the raw material for cheap production," says the political economist. This the South should have learned years ago. But better late than never. Anniston, literally and figuratively, is built on iron, that is to say, the ground beneath and around it is full of ore, while its mainstay is and will be iron production and manufacture. The highest au-

which for years was selected by the red man as his "tilling point," on account of the peculiar richness of the soil and the natural protection of the land from the chilling blasts of early spring and autumn. Says the historian, "here in these peaceful valleys, made rich by centuries of undergrowth, did the wandering tribes of the red man secure from mother earth their subsistence by the simplest arts of husbandry, and here, too, came the chiefs of the different tribes and



WOODSTOCK FURNACES—ANNISTON.



CAR WHEEL WORKS OF NOBLE BROS. & CO.—ANNISTON.

cities of the South. Below is a brief statement of her enterprises, showing the capital stock, number of employees and monthly cash pay roll:

Anniston corporations and industries, showing number of employees and amount of wages paid, in cash:

Corporation or Industry	Capital	Per Annum	Employees	Monthly Wages
Woodstock Iron Co.	\$500,000	3,000	300	\$9,000
Anniston City Land Co.	300,000	300	30	900
Anniston Pipe Works	300,000	300	30	900
Anniston Manufacturing Co.	300,000	300	30	900
Anniston Car Wheel Works	100,000	100	10	300
Anniston Fire Brick Works	25,000	25	2	60
Anniston & Cincinnati Railroad	1,000,000	1,000	100	3,000
Anniston Street Railway	100,000	100	10	300
Street improvements	25,000	25	2	60
New churches	40,000	40	4	120
New city hall	20,000	20	2	60
Union depot	75,000	75	7	210
Private residences	150,000	150	15	450
Business houses	100,000	100	10	300
Boys school building	15,000	15	1	30
Total	\$3,125,000	3,125	312	\$937,500

Where else in the country is there such

press, the shrill whistle of the machine shop, the busy hammer of the workman and then realize the situation. Few, indeed, are the industrial centers which compare favorably with this developing town in North Alabama.

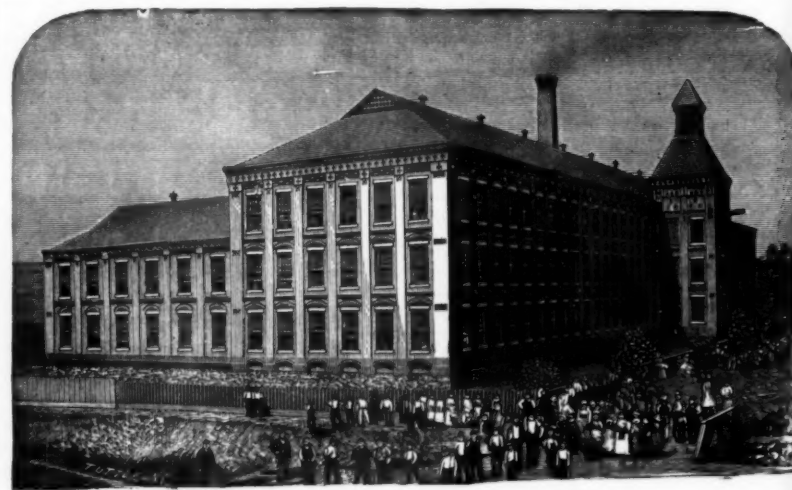
In establishing all these industries not a dollar of debt has been created, not a bond or a note issued; therefore the profits created are kept at home to add to the productive wealth of the community and aid in the building up of new enterprises. It is this principle, that profits only can maintain and increase values and create prosperity, that has been followed so far in all of Anniston's undertakings, and so secure and stable is the foundation of this city that even if Wall street should shake with a financial tremor and a shrinkage in values take place, Anniston would continue on in the even tenor of her way. Therefore, it is seen at once that the men who first came here built not only wisely but well. To Samuel Noble is due the credit of much foresight and discrimination in placing the foundation stones of this now beautiful city, and the growth of the place so far shows how well the master-hand was guided and how clear the conceptions of so much import and significance. The conversion of a people from almost exclusive agricultural pursuits to a great variety of industrial occupations, which contribute to the comfort of man in an infinite variety of

thorities concede it to be a central point in the richest iron region of the South. Within 25 miles of the Coosa coal field and within 50 miles of the great Cahawba coal field, where Anniston capitalists have invested nearly \$2,000,000 cash in the purchase and development of 30,000 acres of coking coal property, (not surpassed in Alabama for the quality of the coke,) in the interest of this town. These mines are now turning out 700 tons of coal a day, and new openings are being made to increase this to 2,500 tons, while several hundred coke ovens, to furnish the very best of coke to Anniston's new furnaces, are now under construction. Nowhere are the advantages of the Anniston iron district surpassed in the abundance and excellence of its ores, being low in silica and phosphorus and rich in iron, requiring less limestone and less coke to make a ton of iron than many other ores, and producing iron of superior quality for all purposes.

made provisions for the coming marches." To-day these valleys hold out to the prospective settler and the small farmer many inducements, and it has been a matter of much surprise that they have not already been secured and taken advantage of. Why? For the good and sufficient reason that no where in the South will

SMALL FARMS PAY BETTER

than around this thriving, prosperous and growing manufacturing center. This is a fact, and in proof of the assertion it may be stated that the marketable vegetables, such as potatoes, beans, cabbages and celery sold on the streets of Anniston, come from East Tennessee, Virginia and Georgia. Will we ever learn that the basis of productive wealth lies in the fact of home production and home consumption. Nowhere is there a finer opportunity for the small farmer than around Anniston. It is to be doubted if there is a field in the South where there is a more sure and profitable return for the



ALABAMA MANUFACTURING CO'S COTTON MILL—ANNISTON.

Tributary to the city, north and south on the East Tennessee, Virginia & Georgia Railroad, east and west on the Georgia Pacific Railroad, and for 50 miles south on the Anniston & Atlantic Railroad, is one of the richest and most productive agricultural parts of the South, and right here is a point to be made, which seems to have been overlooked by the many who have visited this section. In the fertile valleys to the right and left of Anniston, the Choccoloco and the Alexandria, is a stretch of fertile land

money invested than in the rich and available farm lands adjacent to this city. This is a subject which should engage the attention of such farmers in the North and West who from the force of circumstances are compelled to escape the rigors of a Northern climate. The great army of men and women, workers in the mechanical arts and different industries in the city of Anniston, must be fed, and inasmuch as the soil is at the very doors capable of yielding in abundance cereals, fruits, vegetables, &c., why

could not this branch of productive industry, truck farming, be made to pay and become at the same time a great interest in the building up of the place in all matters pertaining to the comfort, the happiness and the sustenance of the people.

OTHER ADVANTAGES.

Anniston is a large distributing point, while naturally the presence of so many work people in steady employment at liberal wages, furnishes the requisite for a first-class retail center. The excellent railway facilities grow apace and in a few years Anniston will be the radiating point for many lines. The Anniston & Cincinnati Railroad is rapidly approaching completion; it is part of a grand trunk line to Cincinnati and Chicago, connecting with the Cincinnati, New Orleans & Texas system at Attalla. This road is built by Anniston capital and will be open for business during the present year. It will shorten the distance to the great West twenty-five miles and open up a large productive country to Anniston. It will give to Anniston unusual opportunities for making cheap iron. One of the special advantages of Anniston is the character of the ore in this vicinity, that it is mined in open cut, the work consisting simply of undermining and blasting down hills of ore, no underground mining or timbering being required.

HEALTHFULNESS.

The climate of Anniston is well balanced and has no superior in the South for moderate temperature both in summer and winter. In this respect it resembles very much the delightful climate of western North Carolina and in many respects it is a charming winter and summer resort. One of Anniston's active practitioners, after having lived here for four years, was asked what he could now say of the climate and healthfulness of the city. He replied as follows:

"After careful study and observation for four years I am fully persuaded that a healthier spot or more delightful climate cannot be found in the United States. Our city is 1,000 feet above the gulf; has the most perfect natural drainage; is free from malaria; has the purest of water, and, in fact, has no local cause for sickness, but has everything conducive to good health. Our climate is such as to make this one of the finest winter resorts in the world, and people seeking a pleasant winter home cannot make a mistake in coming to Anniston."

A DESIRABLE PLACE FOR GOOD HOMES.

The great essentials of a good home are pure air, good water, and a salubrious climate. All of these are to be found here. Besides these great advantages the strict attention paid to the laws of right living, the observance of the laws of hygiene and sanitation, so manifest in this city on every hand, place it on a high plane and give it that distinctiveness by which it has received that just recognition as a healthful, pleasant and salubrious place, both for the home-seeker, the tourist and the invalid. In no section of the South is there offered cheaper and more desirable homes with so many advantages. Free from malarious influences and from mosquitoes, its equable climate, free from the rigorous winters of the North, and from the oppressive heat of less elevated localities of the South, make this place in point of health and comfort equal to any locality on the continent. In addition to the natural charms everything that could contribute to the attractiveness of the city has been done. Broad streets, well-paved, shaded avenues, macadamized pavements and handsome residences give the place an air of solid comfort and permanent prosperity. The city is lighted by electricity, the streets, hotels, opera house, furnaces, &c., being illuminated by the Brush system. There is a fine system of public schools. There are churches of all denominations. The stores are fine, solid, commodious brick structures. One is particularly impressed with the neat, clean, well-to-do appearance of

the business houses, and the entire absence of the small, wooden shed and shanty style of building so often seen in the towns the size of Anniston.

ANNISTON'S GREAT NEED SUPPLIED.

For the past few years this city has outgrown itself, so to speak. Where a few years ago were only a handful of cottages and pleasant homes, to-day are hundreds of handsome home-sites. Looking back but a few months the hill sides surrounding the city grew the same native grasses grown years ago. At this writing looking in either direction suburban homes, tasty cottages and elegant mansions are dotted everywhere on the hill sides yet green with the covering of nature. Surely the city grows apace, both in picturesque beauty, commercial thrift and enterprise. As the city advanced in such wonderful proportions there needs must be better and more expeditious means of transportation within its limits, hence, it became an active necessity for a

STREET RAILWAY COMPANY,

which was formulated and capitalized during the present month. This street railway will encircle the town giving easy access to the very heart of the city. Over six million dollars worth of plants will be brought in close connection with the city, besides giving other advantages hardly to be computed. One of the most important results arising from this street railway system will be the large amount of territory brought into use for the establishment of cheap homes for mechanics and daily laborers, within five minutes of the very center of the city. Another very great advantage will be magnificent sites offered for delightful summer and winter homes away from the sultry lowlands of the South and the frozen icebergs of the North. There is no calculating the immense benefit to the city from this one move. It will be the means of enlarging the city's influence, building up the suburban places, and increasing the city's revenue, not taking into consideration the great convenience, comfort and innumerable blessings which must necessarily follow from cheap and expeditious city transportation.

PROMINENT INDUSTRIES.

First in order comes the Woodstock Iron Co., A. L. Tyler, president, Saml. Noble, vice president and general manager, and F. M. Hight, secretary and treasurer. This was the pioneer company. The furnaces and yards occupy about 50 acres. There are two furnaces, No. 1, started in 1873, and No. 2 in 1879. The ore used is brown hematite, yielding 50 per cent. iron. Besides these furnaces the members of this company own two on the Anniston & Atlantic Railroad. So well known is the pig iron from these furnaces that orders come from all parts of the Union, and the demand has always been greater than the supply.

The Anniston Foundry, removed from Cartersville, Ga., is the property of Messrs. Murray & Stevenson. The buildings cover a large area. Here are manufactured all the castings for the Anniston Car Co., also the work for the Woodstock Iron Co's furnaces at Anniston and Clifton.

The Anniston Car Wheel Works are owned by John and William Noble. This industry had its birth in Rome, Ga., but in 1882 the plant was removed to Anniston. It now consists of a two-story brick machine shop, a foundry and the forge provided with all the modern improvements. The capacity is 200 car wheels per day, the wheels being guaranteed to run 50,000 miles. No car wheel made has a better reputation than the Noble car wheel; it is hard, durable and compact with a finish unsurpassed. They are used on every principal railroad in the South.

The Alabama Car Works, the property of Noble Bros., is a wonderful enterprise. Here freight and passenger cars are turned out, models of exquisite beauty in design and finish. The capacity is twelve cars per day. Two hundred and sixty men, all

skilled mechanics, find employment here. The comfortable Mann boudoir cars are repaired, upholstered and finished here. It is contemplated by the owners to enlarge their plant in order to increase the facilities for their growing business.

The Anniston Pipe Works is a new enterprise with William Spencer, president; S. H. Smith, secretary and treasurer, and Robt. F. Carter, superintendent. When these works are completed they will be the largest in the country, having a daily capacity of over 200 tons of finished pipe. The plant will cover 20 acres and the establishment will give employment to 900 men.

The Anniston Cotton Mill, one of the largest and finest in the State, was established in 1881, and is owned by an incorporated company, of which A. L. Tyler is president, and J. B. Goodwin, secretary and treasurer. The building is three stories, with a massive exterior. The spinning room has a total of 11,700 spindles, and the weaving shop is furnished with 320 Lewiston looms. The manufacture is sheeting and shirting, the annual product being 5,500,000 yards, of which 40 per cent. is exported to China.

The Anniston Compress & Warehouse Co. is a new enterprise. The building is both roomy and large, with a capacity of 1,200 bales per day. The country around the city of Anniston produces 60,000 bales, and this will give a market to the place where the fleecy staple can be handled and compressed with ease and with but little labor.

Then there are Pinder & Co's Machine Shop, the Anniston Boiler & Sheet Iron Works, the Anniston Bloomery and other important industries, which will be treated at length in another article in the MANUFACTURERS' RECORD.

BANKING FACILITIES.

Probably no town in the State of Alabama, and for that matter in the South, of its size and population has more excellent banking facilities than Anniston. The banks are: The First National Bank of Anniston, capital \$100,000, surplus \$200,000, and deposits over \$1,000,000; the officers are Duncan T. Parker, president; Saml. Noble, vice-president, and O. E. Smith, cashier. The Bank of Anniston, capital \$100,000; J. R. Draper, president; W. G. Ledbetter, vice-president, and C. D. Woodruff, cashier, and the Anniston Savings Bank & Safety Deposit Co., with a capital of \$50,000, John B. Rees, president; W. S. Larnard, vice-president, and S. C. Stephens, cashier. These banks are doing a healthy business.

The Anniston City Land Co., with John M. McKleroy as president, has been a very important adjunct in the building up of Anniston. To Mr. McKleroy's fine tact, good judgment, keen foresight and honest purpose much of Anniston's progress is due. The capital stock of the company is \$3,000,000; owning and controlling over 2,700 acres of land in and around the city. The company offers for sale choice business and residential property in all parts of the city; also eligible sites with railroad frontage for manufacturing purposes.

THE HOSPITABLE ANNISTON INN.

Here above the city stands the Anniston Inn, not "sad and prophetic," but in clear and bold outline pointing the way to comfort, ease and royal elegance. In no place in the South is there to be found a hotel equaling this well-known Inn. It is par excellence—a paradise for all modern Archestroties, a resting-place for the weary, worn-out frame, and an abode to recuperate under the intelligent, progressive and healthful modes of hygiene. The Anniston Inn is individually alone in all those relations which minister to the inner man, creates within a home-like desire, and embellishes the brain with thoughts of a higher life, and restores quiet and peace to the worn-out frame. In architectural beauty it is in the line of modern style and finish. For comfort it has no equal in the South. For convenience it is unsurpassed, and for cleanliness, both, in the

higher phase of hygiene and sanitation, it is pre-eminently the first-class hotel of the South. To Mr. Harry Hardell, the affable, able and polite manager, is the traveling public indebted for the comforts afforded by this charming house. Years of experience in the best hotels in Philadelphia have given Mr. Hardell that insight into the wants of the traveling public which is only gained in a life time of thought and diligent study.

In texture and finish, in arrangement and design, in architectural beauty and form within, I doubt if there is another hotel similar to the Anniston Inn. Built of the native woods and finished in exquisite taste (no paint being discernible) it presents a look both pleasing and refreshing. The rooms are nooks of elegant repose. The beds are downy couches, fit for a king; while the service is most admirable in all the details. The table is excellent—the cooking charming to the minutest dish, and the attention all that could be asked for or desired. In fact, it has no duplicate, and the increasing patronage of the general public stamps it as par excellence—the reigning beauty of the Blue Ridge.

Here stands the city of Anniston, a living and enduring monument to Alfred L. Tyler and Samuel Noble, two men who have given this generation of the New South a practical illustration of the good of money, the benefit of common sense, and an inkling of the true principles of a higher type of manhood, which draw men to men and give victory over the baser motives governing and guiding our lives in the daily pursuits of our several avocations. HINTON A. HELPER.

Col. I. W. Avery as a Fine Administrative Officer in the Treasury.

The MANUFACTURERS' RECORD takes great pleasure in copying from the Augusta (Ga.) Chronicle the following well-deserved compliment to Col. I. W. Avery, who is so favorably known to many of our readers:

It was with supreme pleasure that Col. I. W. Avery's numerous friends in Georgia heard of his appointment to a prominent position in the Treasury department at Washington a few months ago.

Col. Avery is chief of the Public Debt division, one of the most important divisions in the department. The special function of this division is the auditing of the public debt in its varied forms. Over \$700,000,000 have been audited in a year. It has filed over 75,000 original authorities for the payment of interest. It passes finally on all the important legal questions connected with the claims referred to. It corresponds directly with all the assistant treasurers—9 in number—in the United States. Its correspondence, moreover, reaches out to the great busy public itself. As soon as Col. Avery got the reins of his division nicely in hand, he began a system of reforms which has commended itself to the honorable secretaries and first auditor of the treasury. The entire work of the division has been systematized and simplified, the large indexes perfected, the records completed and irregularities remedied. Col. Avery is not only a methodical and industrious man, who knows him, know full well the thoroughness which characterizes him in any work he undertakes. For the same reason, we can understand the success which has crowned Col. Avery's effort in administrative reform. We are glad to say that the heads of the treasury have repeatedly given evidence of appreciation of and confidence in Col. Avery, who stands foremost among the chiefs of divisions at the nation's capital.

The treasury rules, especially as they apply to Col. Avery's division, have been so rigidly enforced that suspensions of payment have become rare, if not wholly unnecessary.

The Chronicle congratulates the people on having secured the services of so competent and faithful an officer, and at the same time it congratulates Col. Avery on the fact that the lines have fallen to him in so pleasant a place as the Treasury department. There is not in the service of the government a more deserving or competent officer than Col. Isaac W. Avery.

SHEFFIELD

◆ COLBERT COUNTY, ALA. ◆

The Iron Manufacturing Center of the South.

BEING at the head of navigation, and on the south bank of the Tennessee river, Sheffield is the natural outlet for the mineral and manufacturing products of Alabama and neighboring States seeking a water route to points on the Ohio and Mississippi rivers, and to the Gulf of Mexico, as well as the best distributing point over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. Four railroads certain, and several others assured. Principal shops of Memphis & Charleston Railroad will be erected here pursuant to written contract. These will employ between four hundred and five hundred mechanics, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here.

◆ Five Blast Furnaces Now Under Construction, ◆

Of which one is nearly finished, and the remaining four contracted to completion next spring, have estimated capacity of 700 tons pig iron per day. This is 40 per cent. more than now manufactured at Birmingham, Alabama. Experts do not hesitate to say that iron can be manufactured more cheaply at Sheffield than at Birmingham, and its river transportation facilities will enable Sheffield iron to reach the principal markets at a saving of from

\$2.00 TO \$2.50 PER TON.

A first-class semi-weekly newspaper, printed by steam, is regularly issued. Furniture Factory, Bottling Works, Bakery, 3 Steam Brick Works, 2 Hand Brick Works, 2 Steam Wood-Working Establishments, Water Works, 2 Banks, a Savings Bank, and Steam Job Printing Office already in successful operation, and Iron Pipe Works, 15-ton Ice Machine and five-story hotel, with all modern appliances, will be erected. The Cleveland Hotel, Park House and numerous boarding houses furnish accommodations to travelers. Postoffice, Telegraph Office and Express Office already established. Contracts have been made for the early erection of Electric Light Works, Paint Works, Agricultural Implement and Machine Works and Cotton Compress. Large Stove Works, Machine Shops, additional Iron Blast Furnaces, an extensive Charcoal and Chemical Plant, a large Rolling Mill and other manufacturing establishments under consideration, and will probably be built shortly.

Good Water. Free Public Schools and Churches. Health and Climate Unsurpassed.

Drainage excellent. Splendid opening for men of push and energy. No "Old Fogy" element here.

No better point for profitable investment.

◆ Sites for Manufacturing Enterprises, ◆

And for Free Public Schools and Churches

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; now, (August 21st, 1887,) by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations.

Three years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three-story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants.

LIMESTONE of excellent quality for fluxing iron in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of brown hematite iron ore within twenty miles, along the lines of two Sheffield railroads. The Sheffield & Birmingham Railroad runs through the heart of the Warrior Coal Fields, which abound in first-class coking, steam, gas and grate coal. Timber is abundant and cheap.

The Memphis & Charleston Railroad and the Sheffield & Birmingham Railroad are now in operation into Sheffield. The Louisville & Nashville Railroad Co. is now extending its Nashville, Florence and Sheffield division, which will be completed to Sheffield before the close of the year 1887. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the best combined river and railroad transportation center in the South.

Every merchant and every established manufacturing enterprise is doing a profitable business. More are needed. For further information address

ALFRED H.-MOSES, Vice-Prest. and Manager

Sheffield Land, Iron & Coal Co., - Sheffield, Ala.

Tuskaloosa, Ala.

— * ALABAMA'S NATURAL PITTSBURGH. * —

A Railroad & River Town of 6,000 Inhabitants, in the Coal, Iron & Timber District.

Healthful Location. Salubrious Climate. School Facilities Unequaled by any other town in the South.

Centre of Education for the State. Seat of University of Alabama. Of State Insane Asylum. Of Alabama Central Female College. Hill's Female School. Fine Free School. Churches of all Denominations.

"EXAMINE THE MAP."

— * SITUATED ON * —

Queen & Crescent

— TRUNK LINE, —

IN THE

Warrior Coal Field

AND ON THE

WARRIOR RIVER.

Only Navigable River touching the

Alabama Mineral Field.

Eight Months Navigation. Being Surveyed
now to be opened all the year round.

All Water Navigation to

❖ **MOBILE** ❖

AND THE

Entire Gulf and Atlantic Coasts.

— THE —

Tuskaloosa Northern Railroad

Is now under construction into the

MINERAL and TIMBER FIELDS.

— THE —

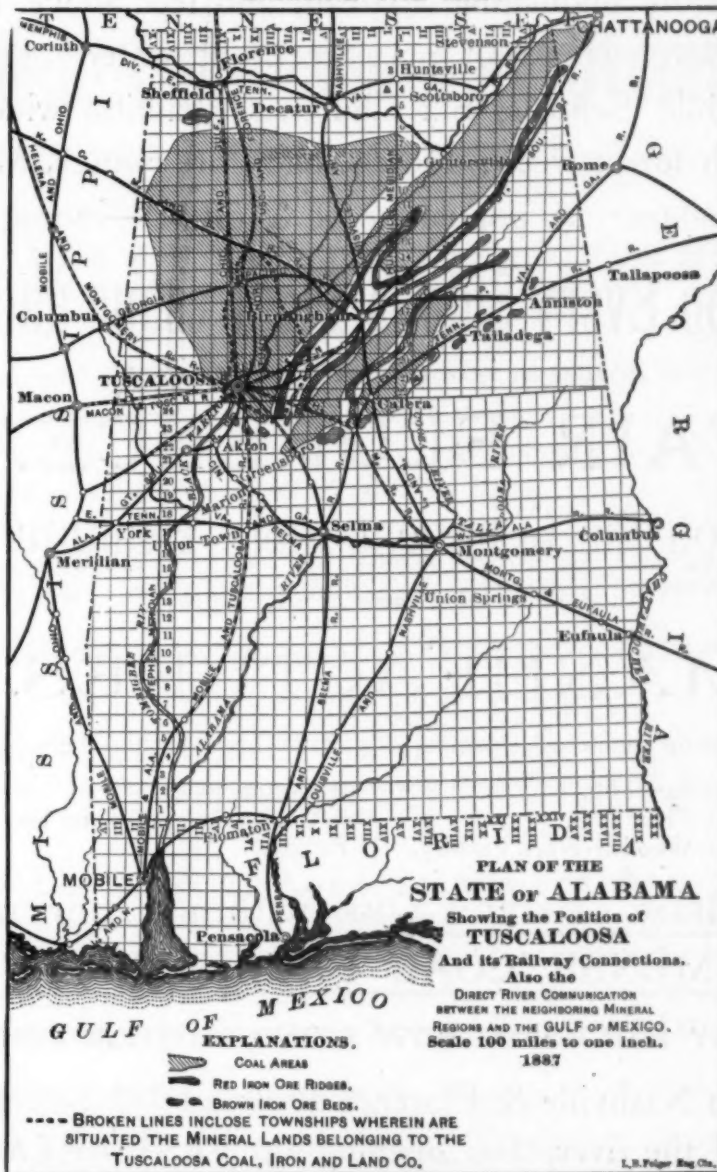
Macon & Tuskaloosa Railroad

Will soon be building into the

COTTON REGION OF MISSISSIPPI.

Fine Farming Region

Around and Below the City.



Superior Inducements

AND

+ ADVANTAGES +

TO ALL

Manufactories Consuming

WOOD, IRON, COTTON.

FINE COOKING COAL

In workable veins near city, fully tested.

◀ **The Fire Clay** ▶

Existing in inexhaustible quantities, has been
practically tested and pronounced

The Best yet Discovered in the South.

Street Car and Dummy Lines

NOW BUILDING.

◀ **Water Works and Electric Lights** ▶

TO BE PUT IN AT ONCE.

COTTON MILL

In Successful Operation.

ALSO

LARGE BRICK WORKS

COTTON-SEED OIL MILL, &c.

Manufacturers Seeking Locations in the South have here

THE GOLDEN OPPORTUNITY.

Many have availed themselves of it, but such is the wonderful richness of the resources of this section that there is

— * ROOM FOR ALL * —

THE Tuskaloosa Coal, Iron & Land Co.,

Owning 4,600 acres of city and suburban property, and 40,000 acres of mineral and timber lands, offers liberal inducements to manufacturers to locate at Tuskaloosa, Nature's City, and invites correspondence and the fullest investigation of its claims.

An illustrated descriptive pamphlet sent free upon application to

W. C. JEMISON, President Tuskaloosa Coal, Iron & Land Co., TUSKALOOSA, ALA.

Florence, Ala.

County Seat of Lauderdale County.



At Head of Navigation on Tennessee River, and at Foot of Muscle Shoals Canal,
which will be open Jan. 1st, 1888.



SITUATED on a gently undulating Plateau, 200 feet above high-water mark, surrounded by three large creeks of pure free-stone water. It has a Court House, Two Colleges, Four Public Schools, Six Churches, beautiful wide streets, graded and graveled, and shaded with forest trees; Hotels, fine store houses, Masonic, Odd Fellows, K. of H. and L. of H. lodges. A population of 2,500—moral, social and hospitable.

— The Scenery on Every Side is Picturesque and Beautiful. —

SO MUCH SO THAT IT IS CALLED BY VISITORS

==== FAIR FLORENCE. ” ====

There is no Place on the Continent more Healthful and Salubrious.

MANUFACTURES.

Within the last six months numerous manufactures have been located here, among the number:

Five Large Blast Furnaces.
One Rolling Mill,
Three Planing Mills,

One Saw Mill,
One Flour Mill,
One Wooden-Ware Factory.

One Cotton Mill,
One Cotton Compress and Ice
Factory.

Two Brick Machines and
Three Hand-Brick Yards.

There are VAST BEDS OF IRON ORE within a few miles North and
IMMENSE COAL FIELDS SOUTH

ACCESSIBLE BY RAILROADS NOW BEING RAPIDLY CONSTRUCTED.

By the 1st of January the Nashville & Florence Railroad will be completed, making three lines of railroad, and the river, thus opening up VAST AREAS OF TIMBER, IRON ORE, COAL, Marble, Limestone, Kaolin, Fire-Clay, and almost every kind of mineral and product.

THE LANDS IN THE SURROUNDING COUNTRY ARE FERTILE AND PRODUCTIVE.

All kinds of Grain, Grasses and Fruits grow to perfection. Springs and Water Courses are numerous, and grazing for Cattle is abundant for eight months of the year.



Pamphlets and maps furnished on application to

Florence Land, Mining & Manufacturing Company.

GADSDEN, ALA.

Is situated on the West Bank of the COOSA RIVER, in the midst of the

RICHEST IRON AND TIMBER SECTION

IN THE FAVORED STATE OF ALABAMA.

➤ The Gadsden Land and Improvement Company ➤

Own large tract of Eligibly Located Residence Property in the Most Desirable Part of the City, and have fine location on river and railroad for

❖ MANUFACTURING ESTABLISHMENTS, ❖

And are offering great inducements to manufacturers to locate their plants in this *FAVORED LOCALITY*. No place in the South has such *Wonderful Advantages*. Situated in the midst of the *RICHEST IRON SECTION in the STATE*, at the foot of Lookout Mountain on the banks of a Navigable River, (*THE BEAUTIFUL COOSA*), surrounded by Forests of the Finest Timber on the Continent, with Fine Building and Fire Clay, and the *FINEST BUILDING STONE* all around us, with

Uninterrupted Health, and the Purest and Best Water and Finest Drainage of any City in the State,

Gadsden should become the Greatest Manufacturing Center of Alabama.

THE Alabama Great Southern, Rome & Decatur, Tennessee & Coosa, Anniston & Cincinnati Railroads, with the ever-flowing Coosa navigable the year round, gives us as *FINE TRANSPORTATION FACILITIES* as any other city enjoys.

We now have Railroad Car Works, Furnaces, Foundry and Machine Works, Saw Mills, Sash, Door and Blind Factory, Furniture Factory, Ice Factory, Paint Mills, Grist and Flouring Mills, Cotton Ginnery, Fine System of Water Works, Electric Lights, Telephone Communication over City, and also to neighboring cities Atlanta and Rome, Ga.

WE WANT Rolling Mills, Bridge and Bolt Works, Cotton Factories, Woolen Mills, Furniture Factories, in fact all kinds of Factories, even Coffin Factories, (but we want to ship the Coffins to some of the other booming cities.)

Liberal Grants of Land will be made by THE GADSDEN LAND AND IMPROVEMENT CO. to any of the above-named industries.

FOR FURTHER PARTICULARS ADDRESS

M. L. FOSTER, Sec. & Treas.

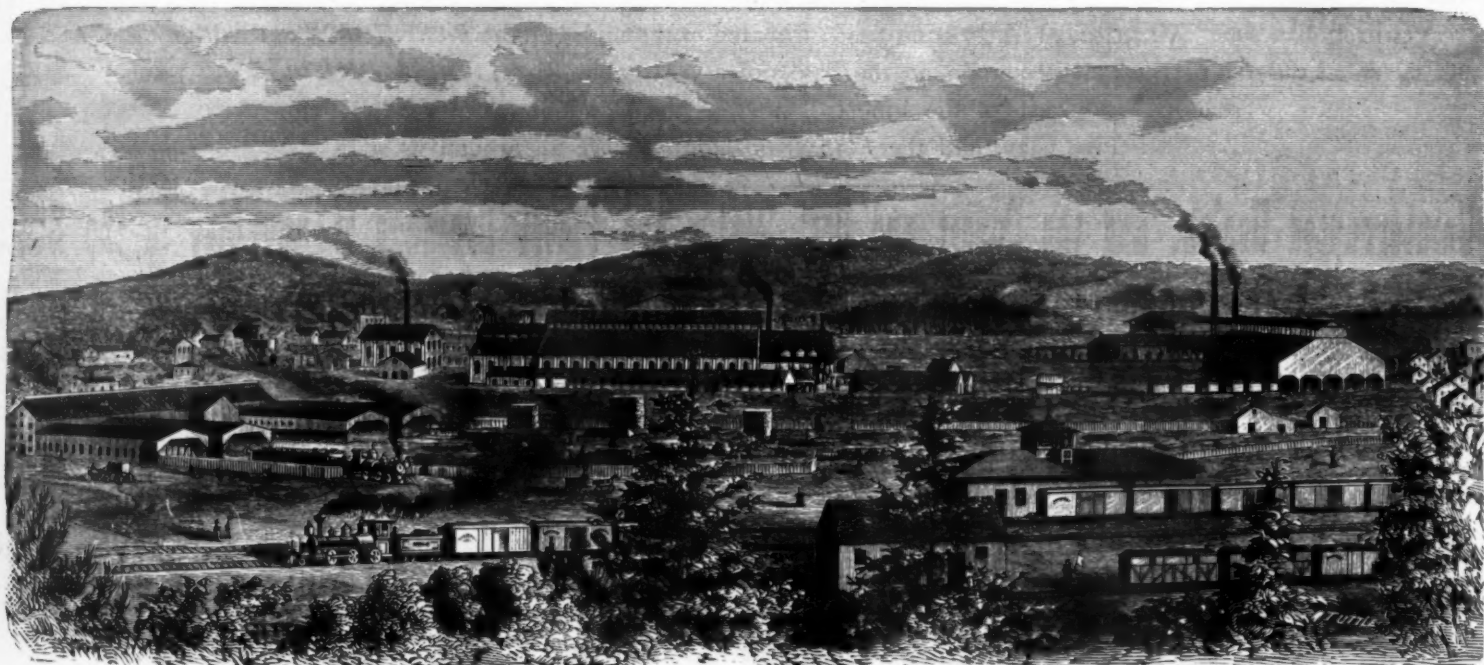
THE GADSDEN LAND & IMPROVEMENT CO. - - GADSDEN, ALA.

POST-OFFICE BOX 145.

ANNISTON, ALA.

"The Model City of the South."

THERE is no healthier or more charming place of residence in America than Anniston; built on the slope of one of the highest of the chain of the Blue Ridge in Alabama, it commands scenery that is unapproachable in the State. Nature could not have formed a more beautiful place for man to build a city or given greater natural advantages. The natural drainage is most thorough and complete, while in addition the city is preparing a system of underground sewerage. *A more delightful and invigorating climate cannot be found anywhere:* mild in winter, cool in summer, a thousand feet above the Gulf, with the high and broken chain, range after range in the east, Blue Mountain in the north, Coldwater Mountain in the southwest, make Anniston the *coolest, healthiest and most attractive of any city in the South.* It has the richest agricultural country surrounding and tributary to it in the State, to support a manufacturing and mercantile population. The mountain sides will grow the grape and every kind of large and small fruit to perfection, and the valleys every product of diversified farming. *It is in the heart of the richest mineral district of the South,* and commands the great fields of brown hematite ores on which the great and successful manufacture of iron must in the end depend for quality and profit in every branch of most skillful and best manufactures of iron and steel. It has tributary to it *the best and most extensive pine forests in North Alabama,* that are reached by roads owned and controlled by Anniston citizens, while it has secured to its industries the very best coal mines and coking coal in Alabama. There is no city in America, in proportion to population, that has the manufactures of Anniston, or employs as many working men, or does a larger mercantile business. The industries already in full and profitable operation in Anniston are the **two Woodstock Furnaces** producing six hundred tons of Standard Car Wheel and Malleable Iron per week, and the **two Clifton Furnaces**, tributary to Anniston, producing nearly as much more. **The Car Works** are fully employed turning out forty cars per week, and are introducing new machinery and larger engines to increase their capacity to twenty cars per day. **The Rolling Mill and Car Wheel Foundry and Steam Forge** are among the largest in the South, of a capacity of two hundred wheels, a consumption of 120,000 pounds of metal per day, exclusive of the Rolling Mill and Steam Forge. These works are being enlarged to meet the increasing demands upon them. **The Cotton Factory** is one of the largest in the South, containing 11,700 spindles, and is running to its full capacity, while the foundry of **Murray & Stevenson**, and machine shop of **Pindar & Co.**, and planing mills of **Miller & Smith** and **Farrar & Co.** employ a large number of men and are crowded with work. The new industries that are now under way and provided for will within the next twelve months **Add Four Thousand Additional Working Men to Anniston's Population.** Two of the **Largest Iron Furnaces in the South**, capable of producing two thousand tons of iron per week, are progressing rapidly, and one of the **Largest and most complete Pipe Foundries in the world** for the production of **Gas and Water Pipe** is under construction,—it will employ nine hundred men.



CAR WORKS, ROLLING MILL AND BLAST FURNACES—ANNISTON.

The **Steel Bloomery**, for the production of Steel Blooms, is nearly completed, and the new **Fire-Brick Works of Taylor & Sons** are in operation. The **Ninety-Inch Morse Cotton Compress**, with its warehouses, has been completed, and is receiving cotton. Forty thousand bales, it is estimated, will be secured to Anniston from the territory that its system of railroads have opened up. The completion of the **Anniston & Cincinnati Railroad** during the present year, that will be owned and controlled by Anniston's citizens, opens up new territory and forms a *New and Shorter Grand Trunk Line to Cincinnati and the great Northwest, and to the Southwest via New Orleans and Shreveport.*

It is only the profits of business and labor that can add to the wealth of a community, add to or maintain the value of real estate, and add to the prosperity of its people. Having this in view, every industry and business in Anniston is established on a *profitable basis.* All its merchants are doing a large and profitable business, far larger than they prepared for or anticipated; it is the same with the manufacturers, while *not a dollar of debt has been created*, either by issue of a bond or placing of a mortgage on any of its old or new industries, leaving their earnings free from fixed charges that must be paid in times of depression as well as of prosperity. *To the investor, either in business, manufacturing or real estate,* nowhere else are presented opportunities as safe, secure and certain as at Anniston, or where they can rest on as healthy and solid foundation. It has trunk line railroad communication with all parts of the United States, and freight rates with the most favored of Southern cities. Two lines of railroads are owned and controlled in the interest of Anniston by its own citizens. *It has the best system of Water Works,* with the purest well water from three hundred feet below the surface, drawn from white quartz sand and gravel, and distributed through the city, with a pressure of 100 pounds to the inch, from a reservoir always full, protecting the city against fire and giving it the lowest rate of insurance. *The city is practically free from debt, and taxation limited to one-half of one per cent.* *The means for education are the very best.* Public Schools of a high grade are provided. One of the finest and best institutes for Young Ladies has been opened, and a College for Boys and Young Men, to which a School of Technology and Chemical Assay Laboratory have been added, is now nearly completed, and the best of teachers and professors secured for both. There are *Churches for all denominations, and Hotel Accommodations that are not surpassed in Europe or America.* The **ANNISTON INN** provides the quiet and comfort of the most luxurious home. *The streets are wide, macadamized, and rolled hard and smooth for pleasant drives.* **STREET CARS AND DUMMY LINES** are being built to different parts of the city, and the **ELECTRIC LIGHT** service enlarged and improved, leaving nothing undone to promote the comfort of its citizens and maintain and increase the value of their property and profits of their business.

The **Anniston City Land Company**, or the **Bureau of Information**, will give any information desired when applied to, and invite all wishing a charming place in which to live, to do business or to make profitable investments, to visit

—●ANNISTON.●—

CONSTRUCTION DEPARTMENT

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Alabama.—G. W. Wilcocks, 17 Pine street, Detroit, Mich., will build a \$5,000 to \$10,000 saw mill, and desires to know of a good location.

Anniston.—It is reported that a new manufacturing company will soon be organized as the Model City Manufacturing Co.

Anniston.—A. L. Tyler has let the contract to build his hospital, previously reported, to Mr. Britton.

Anniston.—Mr. Rubenstein contemplates starting a pants factory.

Bedsole.—A saw mill is being built six miles from Bedsole by S. G. Roberts.

Bessemer.—Howard & Co. have purchased steam brick works and put them in operation.

Bessemer.—The Birmingham Cornice Co. are erecting a building to manufacture cornices.

Birmingham.—The Elyton Land Co. will establish boiler and sheet iron works and are purchasing machinery. They will establish other manufactories soon.

Birmingham.—W. S. Brown, W. J. Vann and others have sold 130 acres of land seven miles from Birmingham to the Lake Superior Land Co. for \$60,000.

Birmingham.—Mr. Friel will increase the output of his coal mines.

Birmingham.—Carter Bros., of Charleston, S. C., have been awarded the contract to erect the factory for the Birmingham Safe & Lock Co., previously reported. It will be two stories, 125x200 feet.

Birmingham.—The Elyton Land Co., reported last week as purchasing machinery to erect works to manufacture freight cars, will soon enlarge the works after their completion and manufacture passenger cars also.

Birmingham.—The Elyton Land Co. have contracted to build 100 houses, to be occupied by employees of the Alabama Southern Railroad.

Birmingham.—C. P. Ehrman will build two-story houses.

Birmingham.—A company is being organized to extensively manufacture horse hardware. Aiken & Lighton can give information.

Birmingham.—The Standard Oil Co. will build a warehouse, 30x120 feet.

Childersburg.—A land and improvement company is being organized. Smith & Co. can give information.

Clanton.—A. J. McCraney is preparing to build a lumber mill.

Columbiana.—A saw and planing mill is being erected near Columbiana by Spencer & White.

Decatur.—S. J. Hahn, of Mobile, contemplates starting a cigar factory.

Decatur.—The Decatur Car Wheel & Car Spring Co., previously reported, have let the contract to erect their works to Turner & Goodwin. The main building will be 75x280 feet.

Decatur.—Frank Goodwin has received the contract to build 30 houses.

Decatur.—The Louisville & Nashville Railroad Co. have let the contract for the erection of their large machine shops, previously reported, to Morris & Newman, of Indianapolis, Ind. There are to be 14 buildings, from 180 to 280 feet each in length.

Decatur.—The name of the \$100,000 stock company previously reported as to be formed to operate a horse shoe nail factory, which will be moved from Chicago, Ill., to Decatur, is the Southern Horse Nail Co. C. C. Harris, of Chicago, is president; F. A. Butler, Chicago, vice-president; R. H. Ballinger, Kankakee, Ill., secretary and W. W. Littlejohn, treasurer. Will erect works at once.

Decatur.—The Decatur Land, Improvement & Furnace Co. are making efforts to secure the establishment at Decatur of the car works which the Pullman Palace Car Co., of Chicago, Ill., contemplate erecting in the South.

Earnest.—Buck & Preston, recently reported as erecting a saw mill, will add planing machinery about February, 1888.

Florence.—W. C. Sherrod will rebuild his gin, recently reported as burned.

Fort Payne.—The Fort Payne Coal & Coke Co., previously reported, will build coke ovens as rapidly as possible. The company has a capital stock of \$100,000.

Gadsden.—Mr. Alexander, of New York, has been prospecting at Gadsden and other places with a view to establishing a foundry and machine shop.

Gadsden.—The Gadsden Ice Co. will add cold storage rooms.

Gadsden.—A broom and handle factory is being started. The Gadsden Land & Improvement Co. can give particulars.

Gadsden.—Standifer & Baker contemplate building a fine hotel.

Geneva.—The contract has been let for the courthouse previously reported to be built. It will cost \$9,000.

Geneva.—Albert Hendrix will build a warehouse.

Huntsville.—W. C. Rosenberg, of Winchester, Tenn., contemplates establishing a spoke and handle factory.

Lownesboro.—Louis H. McCurdy will rebuild his saw and grist mill reported in this issue as burned.

Mobile.—Thomas Carr is preparing to erect a three-story candy and cracker factory, 50x110 feet. His daily capacity will be one ton of candy and 200 barrels of crackers.

Tazewell.—It is reported that a street railroad will be built. If anything is done C. W. Roop can probably give information.

Thompson's Station.—C. W. Fenn is erecting a factory to manufacture spokes, handles, felloes, &c.

Tallahoma.—R. A. Demmick, representing the Southern Supply Ice Co., of Washington, D. C., is making efforts to organize a stock company to build an ice factory.

Tallahoma.—N. Schurtz, of Refrigerator Car Co. will, at their annual meeting on December 13, consider increasing their capital stock.

Northport.—Gaines & Baker, of Northport, have erected a lumber mill eight miles from Northport.

Scottsboro.—A charter has been secured for the railroad previously mentioned as to be built from Guntersville to Scottsboro.

Selma.—The mayor will advertise for bids for building sewers.

Selma.—The Selma, Orrville & Martin Station Telephone Co. will hold a meeting November 28 to increase their capital stock \$4,000.

Talladega.—Martin Brown and James McNally will develop some coal land near Talladega.

Tusculum.—The Catholics will build a college.

Tuskaloosa.—A stock company is being formed to build a large opera house. J. G. Brady can probably give particulars.

Uniontown.—There is talk of erecting a cotton factory.

Union Springs.—A rice mill and a broom factory are to be started in time for next season's crop. McCall & Chapman can give particulars.

Walker County.—F. Koerner, of Wilkesbarre, Pa., has contracted to build coke ovens for the Gulf Coal & Coke Co., of Mobile; also coke ovens for other parties.

ARKANSAS.

Baxter County.—A. C. Cornell has erected a saw mill and a cotton gin, and contemplates adding a shingle machine and a corn mill.

Clarksburg.—D. C. Bristow has opened a coal vein four miles from Clarksburg.

Conway.—J. S. Lander has established a chair factory.

Eureka Springs.—James W. Hart and others contemplate building a cotton factory next year.

Morrilton.—The Morrilton Glass Works are being examined by parties who contemplate purchasing and putting them in operation.

Rogers.—\$10,000 has been raised for establishing a canning factory; will probably be increased to \$20,000.

Siloam Springs.—Charles E. Noyes, lately reported as starting a small distillery, will erect weaving and carding machinery next spring.

FLORIDA.

Aucilla.—A saw mill has lately been erected by G. C. Bishop.

Carabelle.—The Tallahassee, Thomasville & Gulf Railroad Co. have purchased electric light machinery to be erected at their saw mills, &c.

Chester.—The Bells River Canning Co. are purchasing machinery for their factory previously reported.

DeLand.—A company is being organized to build a railroad from Lake Beresford, or the St. Johns river, to DeLand, with a branch to Lake Helen. J. B. Stetson is said to be interested.

Dunnellton.—H. G. Garrett has started a saw mill.

Gainesville.—W. J. Winegar, of Palatka, has purchased a site to build gas works, and Alwill begin work at once.

Homosassa.—W. J. Baily, of Brookville, has moved his saw mill to near Homosassa.

Jacksonville.—S. B. Carter will make surveys for a railroad to be built from Jacksonville to Palatka, about 45 miles.

Key West.—Celestino Palacio & Co., reported last week, will not enlarge their cigar factory at present.

Lincolnton.—E. F. Joyce will sink an artesian well.

Longwood.—Smith & Hunt are reported as surveying for a new railroad to run from near Jacksonville to a point on the Gulf.

Monticello.—McLin & Taylor, previously mentioned as purchasing some new machinery for their planing mill, will put in some more machinery.

Palatka.—A new ice factory, it is said, will shortly be started.

Pensacola.—Collins Bros. have started the manufacture of boots and shoes at 139 Intendencia street.

Sanford.—The Betts Fencing Co., reported last week, will not enlarge their factory until about January 1. They will then probably add wood-working machinery.

GEORGIA.

Atlanta.—The capital stock of the Atlanta Guano Co. will be increased to \$75,000.

Augusta.—The Georgia Construction Co. will probably contract to build part of the Carolina, Knoxville & Western Railroad.

Augusta.—John Jay Cohen will receive bids until December 1 for building the theater previously reported.

Brownwood.—J. G. Wells has started a mill.

Buchanan.—John W. Tomlinson is opening a gold mine and will erect machinery to develop it if investigations prove satisfactory.

Dalton.—W. C. Huff contemplates starting a broom factory and wants to purchase machinery.

Gracewood.—The Central Georgia Land Co. has been incorporated by Robert M. Mitchell, William H. F. Walker, Clarence V. Parks, William F. Walker, Clement A. Evans and others. The capital stock is \$3,750, with the privilege of being increased to \$1,000,000. The company is privileged to build gas and water works, electric light plants, street railroads, &c.

Macon.—Plans have been prepared for the South Macon Baptist Church, previously reported, and bids are invited. It will cost about \$10,000.

Macon.—The Macon Electro-Plate Co. have recently started works at 570 Cherry street.

Macon.—The Macon City & Suburban Railway Light & Power Co., previously mentioned, have asked for a permit to build a street railroad. W. A. Huff is interested in the company.

Rome.—J. D. Kase, of Pennsylvania, is reported as contemplating building a furnace.

Rome.—Mr. Howard has the contract to grade 20 miles of the Chattanooga, Rome & Columbus Railroad.

Savannah.—The city surveyor will advertise for proposals for paving certain streets. The estimated cost is \$95,429.

Tallahassee.—John F. Lange and C. E. Johnson, of New Britain, Conn., are reported as having secured a site for building malleable iron works to manufacture saddlery hardware, agricultural implement hardware, &c. The company will be known as the Tallapoosa Malleable Iron Works.

Tallahassee.—It is reported that Martin & Crandall have started a saw mill and a wood-working establishment.

Tallahassee.—It is stated that several new brick-yards are to be started. If true the Tallapoosa Land, Mining & Manufacturing Co. can give information.

Tallahassee.—L. Rossiter has a large contract for grading on the Chattanooga, Rome & Columbus Railroad.

Tallahassee.—It is reported that Isidor Levi, of Cincinnati, O., contemplates establishing two manufactories.

Tallahassee.—D. Carlton, of Hartford, Conn., and associates will, it is said, incorporate the Tallapoosa Furnace Co., to build a 60-ton charcoal furnace.

Thomasville.—Work on the Thomasville, Tallahassee & Monticello Railroad, previously reported, is being pushed, and the four contractors—Horace Curry, Brown, Campbell and McLain—are preparing to commence grading.

Watkinsville.—A cotton factory is reported to be erected at the Barnett shoals, on the Oconee river. L. Shackelford can give information.

KENTUCKY.

Carrollton.—H. M. Winslow, J. M. Donaldson and others are organizing a company to build gas works.

Elkton.—Water works are projected. John F. Bell can probably give information.

Elkton.—A brick school is to be erected at a cost of \$10,000. John F. Bell can give particulars.

Greenup.—Stephens & Stephens have rebuilt their stave factory previously reported as burned. They contemplate erecting a lumber mill next spring.

Hawesville.—Duncan & Hassan are building a small distillery 2 miles from Hawesville.

Louisville.—The Westview Building Association will build 50 houses next year.

Louisville.—The city will build a new school.

Louisville.—Cooperage works are reported to be moved to Louisville from Indiana. If true the secretary Chamber of Commerce can probably give information.

Louisville.—It is reported that Mason, Gooche, Hoge & Co. have been awarded the contract to lay the track of the Louisville Southern Railroad to Harrodsburg.

Louisville.—The Standard Dry Kiln Co. have lately moved from Detroit, Mich.

Louisville.—J. B. Speed, Charles R. Long and C. W. Gheens have incorporated the Ohio Valley Gas Co., capital stock \$20,000. The object of the company is to develop oil, gas and salt lands.

Louisville.—Geo. H. Becker, Wm. J. Armstead and others have chartered the Becker Refining Co., capital stock \$50,000, for refining cotton-seed and other oils.

Ludlow.—The Cincinnati Southern Railroad Co., (office, Cincinnati, O.) will rebuild their large machine shops reported in this issue as burned. It is said that the shops will be rebuilt at Somerset.

Maysville.—A Baltimore (Md.) party contemplates, it is said, moving his candy factory to Maysville.

Newport.—J. C. Ottinger and others have incorporated the Mexican Tin Reduction Co. to operate in the State of Durango, Mexico.

Nicholasville.—The mill lately mentioned as being erected by L. M. Jackson & Co. is a flour mill and has a daily capacity of 100 barrels.

Olive Hill.—It is reported that a saw and grist mill has lately been erected by L. Tabor.

Paducah.—A stock company has, it is reported, been organized to purchase the bent wood works of B. K. Taylor & Co., at New Albany, Ind., and move them to Paducah.

Pineville.—The Pine Mountain Iron & Coal Co. will build a hotel.

Pineville.—The Pine Mountain Iron & Coal Co. are negotiating for the establishment of several more lumber mills.

Rochester.—The mineral rights on the lands of J. S. Brown, Calvin Taylor and others have been secured by Alabama parties who will develop.

Williamsburg.—Hoffman Bros. have, it is stated, lately added a grist mill to their saw mill.

Williamsburg.—The Kentucky & Tennessee Land Co. has been organized with J. F. Freeman as president; A. Gatliff, vice-president, and R. D. Hill, secretary and treasurer. The capital stock is \$300,000.

LOUISIANA.

Iberia Parrish.—The Avery Salt Works have been purchased by M. Marcus for Northern parties.

Lafayette.—It is reported that the Southern Pacific Railroad Co. will build machine shops.

New Orleans.—Thomas Killeen, lately reported, is building a new iron foundry on Liberty street.

New Orleans.—A. Booth & Co., of Chicago, Ill., are preparing to start their oyster canning factory previously reported.

MARYLAND.

Baltimore.—It is proposed to form a \$100,000 stock company to purchase the Green Spring property at Green Spring station, 14 miles from Baltimore, and build a hotel and baths.

Baltimore.—John Maloney will build 5 two-story houses, and Jacob Saum 2 two-story houses.

Baltimore.—C. A. Pindell will build 15 three story dwellings on Stricker street, beginning at Tenant.

Baltimore.—The Climax Cash Register Co., capital stock \$100,000, has been chartered to manufacture and sell cash registers by Simon D. Newcomb, Shipley Brashear, William McGill, Charles J. Weiner and William H. H. Stevenson.

Baltimore.—Work will soon be commenced on the engine house (No. 14) previously reported. Theodore Oster, building inspector, can give particulars.

Baltimore.—The German Lutherans will build a church, 40x75 feet, corner of Beason and Decatur streets.

Baltimore.—Samuel H. Tagart, George R. Berry, James D. Mason, Jr., Hugh B. Hanna and Charles Cogle have incorporated the Thompson-Houston Electric Light Co., capital stock \$200,000. Mr. Tagart is president.

Baltimore.—The Old Town Merchants' Hotel Co., capital stock \$80,000, has been incorporated by Edward D. Onion, Duane H. Rice, John W. Marshall, Henry Wilcox, Theodore T. Wilcox and others.

Baltimore.—Thomas J. Shryock, Francis P. Stephens, William H. Crawford, Robert Turner, John H. Fowler, William A. Dunn and Solomon Strauss have incorporated the American Electric Co., capital stock \$300,000.

Chestertown.—A new engine, &c., have been put in the Chestertown Water Works.

Towson.—The contract to build the bridge across the Patapsco river at Hammond's ferry, previously reported, has been let to the Wrought Iron Bridge Co., of Canton, O., at \$7,994.

Westernport.—Parties from Altoona, Pa., propose to erect an iron foundry, and possibly machine and car shops, if a site is donated. If anything is done the mayor can give information.

Washington, D. C.—George E. Lemon will erect 2 two-story brick buildings at 1406 and 1408 Sixteenth street, to cost \$44,000.

Washington, D. C.—Samuel Norment will erect 11 brick houses on C street at a cost of \$23,000.

Washington, D. C.—E. C. Gardner has prepared plans for large stone dwelling; also for two houses to cost \$12,000 and \$15,000 for five houses costing \$6,000 to \$7,000 each, one costing \$10,000, and for five-story dwelling.

MISSISSIPPI.

Columbus.—The Hale Lumber & Mill Co., whose saw and grist mill was reported last week as burned, will rebuild.

Crystal Springs.—The Illinois Central Railroad Co. (office, Chicago, Ill.) contemplates building a branch railroad from Crystal Springs to Vicksburg.

Crystal Springs.—The capital stock of the company recently mentioned as being organized to start a canning factory will not be less than \$25,000. C. M. Huber is interested and wants to purchase machinery.

Crystal Springs.—Young & Rhymes have erected a new building for their box factory.

Gloster.—W. W. Haden is surveying for a railroad to Woodville. It is reported that a compress will probably be built.

Greenville.—The Greenville Newspaper & Printing Co., capital stock \$4,000, has been incorporated by Charles A. Smith, J. A. Deaton, Joshua Skinner and others.

Greenwood.—Mr. George will rebuild his gin reported last week as burned.

Gulfport.—There are prospects of a hotel and a cotton compress being erected, probably by the Gulf & Ship Island Railroad Co.

Jackson.—Water works, electric lights, etc., are being agitated, and a bill will be introduced in the legislature to authorize taxation for those and other improvements.

Jackson.—Enoch Bros. are building a new lumber mill. They have contracted for machinery.

Jackson.—It is reported that Michigan parties will erect a wagon and carriage factory. If true, G. D. Bustamante can probably give information.

Meridian.—Thomas Dunn, contractor for building the Warrior Coal Field Railroad, previously reported, has sublet most of the work.

Pascagoula.—Howze & Griffin are making extensive improvements to their saw mills; putting in new boilers, &c.

Pascagoula.—The Pascagoula Lumber Co. have improved their Elder mill.

Vicksburg.—The Vicksburg Improvement Co. has been organized to work up a \$250,000 cotton mill company. It is expected that \$75,000 will be raised in Vicksburg.

Yazoo City.—William O. Rogers, of Boston, Mass.; Willard G. Underwood, of Hancock, New York, and Clarence Gordon, of New York City, have incorporated, in New York, the Yazoo-Delta Land & Lumber Co., capital stock \$140,000, to purchase and develop timber lands, manufacture lumber, &c. Will operate in Yazoo, Washington and Sharkey counties.

NORTH CAROLINA.

Asheville.—The Asheville Electric Light Co. are purchasing machinery to enlarge their incandescent plant.

Asheville.—The Asheville Ice Co., capital stock \$25,000, has been organized to build a 10-ton factory and has contracted for machinery. J. P. Sawyer is president; J. G. Martin, vice-president, and E. J. Holmes, secretary and treasurer.

Blues' Crossing.—A. F. Page and others, previously mentioned as contemplating building a railroad from Blues' Crossing to Troy, will probably soon organize as the Aberdeen & West End Railroad Co.

Davidson County.—Arizona parties have purchased gold lands and will probably develop.

Elizabeth City.—W. F. Williams will erect a steam grist mill.

Fayetteville.—F. C. Fields, of New Jersey, has made a proposition to build water works to cost \$50,000 or \$60,000. It will probably be accepted.

—A building will be erected



Goldsboro.—H. A. De Kay is negotiating for the erection of an electric light plant.

Greensboro.—The proposition of Mr. Keogh to build water works has been accepted.

Greensboro.—The Greensboro Gas Co. have put in a new bench of retorts and made other improvements.

Henderson.—Parties are corresponding with a view to building gas works. If anything is done the mayor can give information.

Hendersonville.—The city will decide on January 2 whether or not to build the water works previously reported.

Hendersonville.—The hotel recently mentioned as to be built will be 120x150 feet. An elevator is wanted. J. P. Rickman can give particulars.

Hickory.—It is reported that a roller flour mill has lately been erected.

High Point.—It is reported that the Empire Plaid Mills will be enlarged.

Marion.—Northern parties are preparing to develop a gold mine on Vein mountain, 8 miles from Marion.

Morganton.—English parties contemplate erecting a saw mill. If anything is done the Morganton Land & Improvement Co. can probably give information.

Murfreesboro.—E. C. Morrell contemplates establishing a sash factory as soon as the Murfreesboro Railroad is built.

Oxford.—The "Commonwealth" has been organized with W. A. Davis as president; E. T. White, secretary, and J. A. White, treasurer. The object of the company is to build up Oxford. Committees have been appointed to secure the erection of gas works, water works, &c.

Oxford.—It is reported that S. W. Mitchell will erect a saw and planing mill.

Oxford.—G. K. Handley will erect a planing mill and sash and blind factory.

Polkville.—Calton Bros., whose saw and grist mill, shingle mill and cotton gin were lately reported as burned, are rebuilding.

Shine.—B. J. & R. E. Best are rebuilding their steam saw and grist mill and cotton gin reported last week as burned.

Taylorsville.—E. A. Womble, previously reported as starting a carriage factory, has, with W. A. Gelland, formed the Highland Buggy Co.

Washington.—C. M. Brown contemplates starting a canning factory.

Wilmington.—The Wilmington Street Railway Co. are arranging to build their street railroad previously reported.

Wilmington.—Tennent & Taylor Bros. have purchased machinery to start a knitting mill. Will manufacture hose at first. It will be known as the Hanover Knitting Mill.

SOUTH CAROLINA.

Aiken.—A. S. Segler contemplates erecting a flour and grist mill.

Charleston.—John H. Steinmayer, Aaron J. Barton, Samuel J. Peggall and John D. Murphy have incorporated the Steinmayer Lumber Manufacturing Co., capital stock \$30,000.

Charleston.—The county commissioners will build a new jail.

Cheraw.—The Cheraw Iron Works, previously reported, has been organized with H. L. Louchlin as president, and W. A. Hinshaw, superintendent. Work on building will be commenced at once.

—George T. Brott, of Washington, D. C., has been prospecting with a view to establishing a factory to manufacture cotton gin.

—The Hampton Brick Works, capital stock \$5,000, have been incorporated by E. Cobb, F. F. Belcher and Leonard Wilson.

—The Marion Cotton Mill Co., previously reported, has raised \$30,000 and has an offer from the North of \$40,000 worth of machinery, provided \$40,000 is secured in Marion.

Port Royal.—Edward Flynn, of New York, and others, reported last week as to build large dock, &c., will erect a large cotton compress, and probably phosphate works.

South Carolina.—Application will be made to the legislature for a charter for the Norfolk & New Orleans Railroad to run from a point on the Savannah river through Fairfield, Winnsboro, Great Falls, &c. It is the same line as the proposed Winnsboro, Wadesboro & Camack Railroad.

TENNESSEE.

Ashland City.—A. H. Dozier will probably develop a gold mine.

Athens.—R. J. Fisher, secretary and general manager the Athens Mining & Manufacturing Co., states that they have commenced work on the cotton mills to cost \$150,000, the \$50,000 hotel, street railroad, &c., and are negotiating for the erection of their 100-ton iron furnace, previously reported.

Athens.—The report recently referred to that Mr. Moore would move his chair factory from Ohio to Athens is correct. The Athens Mining & Manufacturing Co. can give particulars.

Bristol.—Mr. Slater, representing English parties, is prospecting for a site for a large woolen mill. If anything is done the Bristol Land & Improvement Co. can probably give particulars.

Bristol.—H. H. Corson has ordered machinery to erect the Thompson-Houston electric light plant reported last week. A local company has been formed to purchase the plant after it has successfully been put in operation.

Blount County.—The Flanagan Chair Co. are refitting and enlarging their factory.

Chattanooga.—The Chattanooga Agricultural Works, previously reported, have let the contract for six buildings to D. P. Chandler at about \$50,000.

Chattanooga.—The Standard Machine Co., of Bay City, Mich., previously reported as to move their works to Chattanooga, have decided on a location and will erect their buildings immediately. They will reorganize as the Chattanooga Machine Co.

Chattanooga.—H. Clay Evans, Charles R. Evans, C. W. Vinson, John P. Richardson, C. A. Lyerly, F. C. Mitchell and John C. Brain have incorporated the Chattanooga Cement Manufacturing Co.

Chattanooga.—The Cincinnati Southern Railroad Co. (office, Cincinnati, O.) will probably enlarge their machine shops.

Chattanooga.—J. H. Vandeman will erect a \$6,000 brick building on Pine street.

Chattanooga.—The capital stock of the Bradt Printing Co., reported last week as chartered, is \$20,000. George M. Bradt is president and general manager; D. P. Henderson, vice-president, and Gay Bradt, secretary and treasurer.

Chattanooga.—S. W. Divine and E. Watkins will build probably 20 or 30 houses.

Chattanooga.—Efforts will be made to form a stock company to build a hotel on Market street.

Chattanooga.—It is rumored that the Tunis Lumber Co., of Baltimore, Md., are prospecting with a view to building a planing mill.

Chattanooga.—W. Eastman has been awarded the contract to build the school on Montgomery avenue lately mentioned. It will cost \$24,500.

Chattanooga.—Peoples Caldwell & Hardwick will erect 3 three-story brick buildings to cost \$12,000.

Chattanooga.—The East End Land Co. contemplate spending \$40,000 to \$50,000 in improvements.

Clarksville.—John F. Shelton and others have organized a stock company to start a steam laundry.

Cleveland.—Henry Horner will establish bed spring and mattress factory.

Cleveland.—There is some talk of another street railroad being built.

Clinton.—H. P. Narcross has purchased the planing mill of I. M. Narcross, Jr., and will remodel and enlarge it.

Friend's Station (P. O. at Newmarket).—A. S. Miller is building a mill near Friend's Station.

Glen Mary.—Sniffer & Scott, of Waverly, N. Y., will, soon develop or sell their coal lands near Glen Mary.

Johnson City.—H. Lumsden has the contract to build 3 miles of the Charleston, Cincinnati & Chicago Railroad.

Knoxville.—The Knoxville Belt Railroad Co. will, it is stated, build their road at once.

Knoxville.—W. A. Horne is thinking of erecting a tobacco factory, but has not fully decided.

Knoxville.—M. E. Thompson will build a hotel on Reservoir street to cost \$30,000 or \$40,000.

Knoxville.—There is talk of a fine hotel being built on Gay street.

Knoxville.—The Southern Car Works are rearranging and improving their works and are building two new warehouses.

Memphis.—The Memphis City Railway Co. will run their cars by electricity.

Memphis.—D. H. Ball, of Renovo, Pa., recently reported as to erect a factory to manufacture shingle machinery, is president of the Renovo Land, Lumber & Shingle Co., who will build the factory. The company will also build a shingle mill with a daily capacity of 100 M shingles.

Memphis.—The National Manufacturing Co. has been incorporated by C. M. Coen, S. P. Read, John R. Tague, E. B. McHenry and M. Burke.

Mont Eagle.—J. W. S. Arnold, Telfair Hodgson and others have formed a company to build a town near Mont Eagle. They have, it is said, about 30,000 acres of land.

Morristown.—J. S. Crump, O. C. King, H. H. Rice, J. B. Jones and others have incorporated the company reported last week as to manufacture door, alarm and call bells.

Nashville.—J. W. Thomas & Son have ordered machinery to rebuild their coffee roasting establishment reported last week as burned.

Nashville.—The Percy Cane & Corn Harvester Co., previously reported, expect to build a factory soon.

Petersburgh.—P. H. Haisting, J. W. Haisting, W. S. Porter, T. C. Hart and others have chartered the Petersburg & Liberty Valley Turnpike Co. to build a road 5 miles long.

Springfield.—The flour mill of Mr. Craighead, on Red river, will be remodeled to the roller system at a cost of about \$34,000.

South Pittsburg.—William Bowran is organizing a stock company to establish an ice factory and a steam laundry.

St. Joseph.—Indiana parties are negotiating for the building of one or more charcoal furnaces at Iron City. If anything is accomplished the Iron City Co. can give particulars.

Tazewell.—J. C. Garnett is building a hotel.

Tazewell.—It is reported that a street railroad will be built. If anything is done C. W. Roop can probably give information.

Thompson's Station.—C. W. Fenn is erecting a factory to manufacture spokes, handles, felloes, &c.

Tullahoma.—R. A. Demmick, representing the Southern Supply Ice Co., of Washington, D. C., is making efforts to organize a stock company to build an ice factory.

Tullahoma.—N. Schurtz & Co., of New Jersey, have been corresponding with M. R. Campbell in regard to starting a carriage wheel factory.

TEXAS.

Brownsville.—The San Antonio & Aransas Pass Railway Co. (office, San Antonio) will extend their road to Brownsville.

Burnet.—Funk & Buas, of Austin, will probably build a three-story stone building for F. H. Holloway.

Burnet.—Wm. M. Spittler invites bids for boring an artesian well.

Cameron.—It is rumored that a flour mill will be built by Frank Jackson.

Clarksville.—Mr. Bateman and others will sink an artesian well.

Cleburne.—The Gulf, Colorado & Santa Fe Railroad Co. (office, Galveston) will build a new and larger depot.

Columbus.—A canal is to be built to furnish power for manufactories. F. Seaman can give information.

Corsicana.—A sewerage system is contemplated. The mayor will give particulars if anything is done.

Corsicana.—J. E. Whiteselle, recently reported as enlarging his electric light plant, has, with Joseph Huey, James Garrity and W. J. McKie, incorporated the Corsicana Electric Light & Power Co., capital stock \$50,000.

Corsicana.—The Board of Managers will shortly advertise for bids for building the State Orphan Asylum, previously mentioned. James Garrity can give particulars.

Dallas.—The Dallas branch of the Co-Operative Manufacturers' Alliance has been organized to start the agricultural implement and furniture factory previously mentioned. They have secured the machinery hall on the Cole fair grounds for their factory.

El Paso.—The East El Paso Town Co. will improve their property.

El Paso.—The El Paso Northwestern Railway & Telegraph Co., reported last week as chartered, will purchase the franchise of the El Paso, St. Louis & Chicago Railway Co. and will complete their road.

El Paso.—C. C. Fitzgerald, of Brooklyn, N. Y., has purchased a site and ordered machinery to erect smelting works. The first furnace will be of 15 tons capacity. He will afterwards organize the International Ore & Smelting Co.

El Paso.—C. C. Fitzgerald, of Brooklyn, N. Y., reported in this issue as to erect smelting works, will develop a coal mine near El Paso.

Fort Worth.—It is probable that a sorghum sugar mill will be erected.

Fort Worth.—The city council contemplate erecting a garbage crematory.

Galveston.—Walter Gresham and others are trying to organize a company to build a bridge to the mainland.

Gatesville.—The contract to erect the State Reformatory building has been let to Mr. Smith, of Austin, at \$31,250. He will commence work at once.

Granbury.—Hanie, Pierce & Co. are building a roller flour mill.

Hempstead.—A machine shop will be erected at the Prairie View Normal School, 6 miles from Hempstead. T. M. Scott can give information.

Jefferson.—R. Ballauf and Charles McKeown are forming a stock company to prospect for coal and develop mines if found in sufficient quantities.

Kyle.—A meal mill will be erected by Albert Nance.

Llano.—It is reported that the Austin & Northwestern Railroad Co. will extend their road to Llano. It is now being extended to Marble Falls.

Llano.—S. D. Lacey has purchased 814 acres of iron ore lands, and will organize a company to develop the lands.

Longview.—The Texas & New Mexico Mining & Milling Co. have increased their capital stock to purchase machinery for their mines.

Marshall.—The Harrison County Land & Immigration Co. has been incorporated by C. E. Hynson, C. H. McGill and T. P. Hawley.

Marshall.—The Marshall Car Wheel & Foundry Co. expect to build an additional machine shop, 80x100 feet, in the spring.

Marshall (near).—M. J. Wheat will add new machinery to saw mill.

McKinney.—The Collin County Alliance Milling Association are building a planing mill and have ordered machinery.

Mexia.—Col. Chambers and others will charter the New Orleans, Mexia, Cleburne & Northwestern Railroad Co. The capital stock will be \$1,400,000.

Pottsboro.—Coal mines 5 miles from Pottsboro will probably be developed. If anything is done James Cummings can give information.

Rockland.—The Rockland Lumber Co. are building a new saw mill with a daily capacity of 40 M feet.

Sabine Pass.—The Kansas City & Sabine Pass Coal & Iron Co., capital stock \$5,000,000, has been incorporated at Kansas City, Mo., to develop lands along the Kansas City & Sabine Pass Railroad, recently reported. William Anderson and Daniel J. Haynes are among the directors.

San Angelo.—An offer has been made to build electric light works in connection with the water works.

San Marcos.—The Hays County Farmers' Alliance have selected a site on the San Marcos river for their flour mill.

Temple.—The Gulf, Colorado & Santa Fe Railroad Co. (office, Galveston) are prospecting for a site for their \$30,000 hospital, previously reported.

Texarkana.—The Texarkana Street Railroad Co. has been chartered.

Texarkana.—The Commissioners Court has purchased site on which to build a \$40,000 courthouse.

Vernon.—The Fort Worth & Denver City Railway Co. (office, Fort Worth) will build an iron bridge across the Pease river.

Victoria.—The Southern Pacific Railroad Co. are negotiating for the extension of their railroad to Beeville.

Waco.—The contract to build the iron bridge across the Brazos river, previously reported, has been awarded to the King Iron Bridge & Manufacturing Co., of Cleveland, O., at \$49,500. It will be 560 feet long.

Waxahachie.—D. B. Bullard will sink an artesian well.

Waxahachie.—Swatt & Wheatley have contracted for a brick building 47x90 feet.

Waxahachie.—The contract to build the jail, previously reported, has been awarded to the Pauley Jail Building & Manufacturing Co., of St. Louis, Mo., at \$44,000.

VIRGINIA.

Amherst.—A canning factory will probably be started.

Buchanan.—Anderson Boozie will start a canning factory about 3 miles from Buchanan.

Fauquier County.—There is talk of a stock company being formed to develop copper mines.

Green Forest.—B. C. Moomaw & Co. will start a canning factory with a capacity of 20,000 cases.

Goshen Bridge.—The report last week that E. J. Bird, of Ironton, Ohio, is negotiating for the lease of the Victoria iron furnace, is incorrect.

Leesburg.—The supervisors of Loudoun county have appropriated \$10,000 to build a jail. Lemuel Norris will prepare plans and specifications.

Lexington.—A canning factory is to be established. Barclay & Co. can give information.

Lynchburg.—W. B. Jones and Louis Stremmel will put in machinery to manufacture the interior parts of organs, and probably the interior parts of pianos.

Lynchburg.—William H. Ford is erecting a four-story building 43x100 feet, to be used for manufacturing purposes.

Lynchburg.—The contract to build the approaches to custom house has been let to McCarthy & Baldwin, of Washington, D. C., at \$4,789.

Lynchburg.—John A. Cannon, of Manassas, has received the contract to build a large engine house for the Virginia Midland Railroad Co.

Mount Crawford.—James B. Campbell will rebuild his saw mill and sorghum evaporator, lately reported as burned.

Norfolk.—The city council are considering several propositions for increasing the capacity of the water works and erecting filtering machinery. The mayor can give particulars as soon as anything is decided on.

Norfolk.—The improvements previously mentioned to be made at Lambert's Point by the Norfolk & Western R. R. will, it is said, cost \$500,000. Work will be commenced in the spring.

Richmond.—The Westham Granite Co. have contracted to furnish the city with 1,550 tons of stone for the city hall, at a cost of \$11,037.12.

Richmond.—The Dispatch Co. have put in a new Hoe press and stereotyping machinery.

Roanoke.—The property of the Rorer Iron Co., including the narrow gauge railroad, has been sold to William Welch for a syndicate.

Suffolk.—Armstead & Joiner have contracted to build several bridges for the Atlantic & Danville Railroad near Suffolk.

Tazewell C. H.—A saw mill and a planing mill and sash and blind factory are being erected.

Tazewell C. H.—The Shamokin Coal & Coke Co. will, it is reported, build 100 fuel coke ovens and possibly 50 bank ovens.

Tazewell C. H.—It is rumored that the Elkhorn Coal Co. will build 100 coke ovens.

WEST VIRGINIA.

Ansted.—The Mill Creek Coal & Coke Co., capital stock \$50,000, has been incorporated to engage in coal mining, coke making, &c.

Charleston.—Henry Dilcher, of Pomeroy, Ohio, previously mentioned as to erect a factory to manufacture sash, doors, building materials, &c., will soon want machinery.

Charleston.—Thomas Thatcher, William Barnum, Henry B. Anderson and Jason Henman, of New York city, and George Hoffman, of Brooklyn, N. Y., have incorporated the Kanawha Improvement Co., to mine coal, mine and manufacture iron ores, &c. The capital stock subscribed is \$25,000.

Charleston.—The Charleston National Bank has purchased a site to erect a bank building next spring.

Clarksburg.—John W. Hill, Glenn Building, Cincinnati, is preparing plans for the water works previously reported as to be built, at a cost of about \$50,000. Contracts will probably be let in January for the work.

Guyandotte.—A woolen factory will be started by Irvin Hartell.

Martinsburg.—The Berkley Corn Harvester Co., capital stock \$1,000,000, has been incorporated to manufacture agricultural implements by John Fitz and others.

Martinsburg.—The Cumberland Valley Railroad Co. (office, Chambersburg, Pa.) have bought the Martinsburg & Potomac Railroad. They will probably soon begin building their road to Winchester, Va., previously reported.

Martinsburg.—It is reported that New York and Philadelphia parties will purchase and enlarge the iron foundry of John Fitz.

New Cumberland.—John Porter is rebuilding his fire-brick works lately burned.

Parkersburg.—The Second National Bank has purchased the oil refinery of Moses Sweetzer.

BURNED.

Boiling Springs, Ala.—The mill of W. L. Fluker.

Chattanooga, Tenn.—The steam laundry of Cotton & Dean.

Cooke County, Tenn.—The distillery of Mr. Harper.

Desdimonia, Texas.—The flour and grist mill of the Desdimonia Mill Co.; loss \$8,000.

Ellaville, Ga.—The mill and gin of H. G. Daniel.

El Paso, Texas.—The factory of the Union Powder Co. wrecked by an explosion.

Greenville, Texas.—The Texas Compress Association's cotton compress; loss on press probably \$70,000.

Huntington, W. Va.—A fire on November 21 burned the machine shop of Doyle & Co.; the machine shop of Ingram & O'Neal; a wagon factory, &c.

Lownesboro, Ala.—The saw and grist mill of Louis H. McCurdy. He will rebuild.

Ludlow, Ky.—The large machine shops of the Cincinnati Southern Railway Co. (office, Cincinnati, O.); loss \$175,000. Will be rebuilt, probably at Somerset.

Memphis, Tenn.—Two cotton compresses and several warehouses owned by the Merchants' Cotton Press & Storage Co.

Putnam, Ga.—The mill and gin of Daniel & Read, 2 miles from Putnam.

Rome, Ga.—The machinery at the Rome Cotton Factory damaged about \$1,500 by an explosion.

Royston, Ga.—The saw mill, shingle mill and cotton gin of J. S. Campbell.

The gins of Joseph Henry, Natchitoches, La.; E. B. Blalock, Woodlawn, Texas; W. House, Doraville, Ga.; Henry Simpson, Triana, Ala.; W. E. Hunt, Winterville, Miss.; Johnson & Holloway, Hickory Plains, Ark.; Colonel Clanton, Livingston, Ala.; Tarver Waddell, Pine Bluff, Ark.; John Till, Bragg's, Ala.; E. B. Isler, Jones county, N. C.; John P. Moore, Helena, Ark.; E. Stogsdille, Fackler, Ala.; Joseph George, in Newton county, Ga.; W. R. Walters, Manlyville, Tenn.; Felix D. Lester, Madison county, Tenn.; John F. Jenkins, in Wilkinson county, Miss.; Ventees Bros., in Point Coupee Parish, La.; Miss Rose Walsh, 6 miles from Natchez, Miss.; John Morrison, Bell's, Texas, on Wilburn Farm, near Walnut Lake, Ark.; E. W. Rembert, Spring Place, Ga.; McIver Williamson, Florence, S. C.; E. M. Bacon, Cumming, Ga., and A. W. Heath, Curretan's Store, N. C., have been burned.

To Manufacture Wagons, Carriages, &c.

WEST POINT, MISS., Nov. 19, 1887.

Editor Manufacturers' Record:

The West Point Co-operative Trade & Manufacturing Association has not yet organized, but will as soon as the charter has been published necessary time. Our object is to manufacture wagons, carriages, carts, agricultural implements, put up a canning factory for fruits and vegetables, and run a general merchandize store. All stockholders must be Knights of Labor.

JNO. HENDERSON.

GOLDSBORO, N. C., Nov. 18, 1887.

Editor Manufacturers' Record:

It is rumored that an electric light plant will be put in here. J. B. WHITAKER, JR.

Rebuilding Saw and Grist Mill.

SHINE, N. C., Oct. 17, 1887.

Editor Manufacturers' Record:

We are rebuilding steam saw and grist mill and cotton gin, and will be ready for work in two weeks. R. J. & R. E. BEST.

Will Start Knitting Mill.

WILMINGTON, N. C., Nov. 20, 1887.

Editor Manufacturers' Record:

We are making arrangements to start a small knitting mill, to be known as "Hanover Knitting Mills." Will make a specialty of hose to begin with. Expect to begin operations 1st of December.

TERRENT & TAYLOR Bros.

MACHINERY WANTED.

[If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish send us particulars as to the kind of machinery needed. We will make your want known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, &c.]

A Husk Hackling Machine is wanted by W. M. Wheeler, Charlotte, N. C.

Broom Machinery.—W. C. Huff, Dalton, Ga., wants prices of broom machinery.

Canning Machinery.—C. M. Huber, Crystal Springs, Miss., wants to purchase machinery for a canning factory.

Diamond Drill.—J. G. Brady, Tuscaloosa, Ala., wants to purchase a second hand diamond drill to prospect for coal. He prefers a Sullivan drill.

Engine, Lathes, &c.—G. W. Parketon & Co., Laurens, S. C., want to purchase engine, engine lathes, pipe machinery, &c.

Fire Alarm System.—The mayor of Raleigh, N. C., will receive proposals for putting in a fire alarm system.

Plumbing and Gas Fitting.—Proposals for the plumbing and gas fitting for the new post-office building at Baltimore, Md., will be received until December by Will A. Freret, Washington, D. C.

Steel Rails.—The Chattanooga, Rome & Columbus Railroad Co., Chattanooga, Tenn., will advertise for proposals for furnishing steel rails.

Bessemer Ore in North Carolina.

TRYON CITY, N. C., Nov. 18, 1887.

Editor Manufacturers' Record:

We have made considerable development on a ten thousand acre tract of land near King's Mt. Station, of Bessemer iron ore. Found veins from 3 feet to 14 feet in thickness at intervals for a distance of four miles on the strike of the veins. The ores are magnetic, specular hematite and brown hematite; all sufficiently pure for Bessemer process, and range in metallic iron from 48 to 60 per cent. We are now trying to associate capitalists in the enterprise with us, that we may properly develop mines, build tramways, etc. PARROTT & ARMSTRONG.

Cotton Factory to be Built.

WATKINSVILLE, GA., Nov. 15, 1887.

Editor Manufacturers' Record:

Another enterprise for our section is a cotton factory on the Oconee river at Barnett's Shoals, which will be built in the near future. L. SHACKELFORD.

Building Flour Mill.

NICHOLASVILLE, KY., Nov. 15, 1887.

Editor Manufacturers' Record:

We are building a 100-barrel mill at this place, hoping to complete same early in January, 1888. D. M. JACKSON & Co.

Will Rebuild Saw Mill.

PINEBLOOM, GA., Nov. 16, 1887.

Editor Manufacturers' Record:

I shall rebuild at once; will be sawing again in about 10 days. B. B. GRAY.

GREENUP, KY., Nov. 21, 1887.

Editor Manufacturers' Record:

Our works here consists of stave sawing, backing and jointing. We will probably start lumber mill in the spring.

STEPHENS & STEPHENS.

LYNCHBURG, VA., Nov. 21, 1887.

Editor Manufacturers' Record:

I am building a large factory, 100 feet long by 43 feet wide and four stories high. I am as yet undecided for what purpose I will use it. WM. H. FORD.

AUCILLA, FLA., Nov. 15, 1887.

Editor Manufacturers' Record:

Mr. G. C. Bishop has recently erected a saw mill near here. M.

Will Erect Planing Mill.

OXFORD, N. C., Nov. 19, 1887.

Editor Manufacturers' Record:

I will erect a planing mill and sash and blind factory. G. K. HUNDLEY.

Will Manufacture Lumber.

CLANTON, ALA., Nov. 17, 1887.

Editor Manufacturers' Record:

We contemplate commencing the manufacture of yellow pine lumber in a few days, 3 miles west of Clanton.

JOHNSON & McCRAINE.

Building a Cheese Factory.

AUSTIN, TEXAS, Nov. 16, 1887.

Editor Manufacturers' Record:

We are at work now building with a view to beginning operations next spring. Our operatives will be brought from New England. We propose to run two hundred cows. Our firm name will be

ROGERS & ISHERWOOD.

Will Erect a Cotton Factory.

GREENVILLE, S. C., Nov. 17, 1887.

Editor Manufacturers' Record:

I will erect a cotton factory shortly to manufacture a fine quality of yarn.

C. H. LANNREAU.

Building a Piano Factory.

ATLANTA, GA., Nov. 16, 1887.

Editor Manufacturers' Record:

The Atlanta Piano Co. have broken ground for a factory here and it will be completed in about 90 days, and the plant will cost about \$25,000. G. H. HALLIDAY.

Will Rebuild Mill.

COLUMBUS, MISS., Nov. 16, 1887.

Editor Manufacturers' Record:

We will rebuild our mill at once, and make a specialty of furnishing choice cypress for Western markets.

HALE LUMBER & MILLING CO.

Will Erect Grist Mill.

GREENSBORO, ALA., Nov. 15, 1887.

Editor Manufacturers' Record:

We have made all arrangements to erect a ginnery and grist mill at this place, and expect to have it in operation by January 1, 1888. H. H. EVANS & Co.

ROME, GA., Nov. 17, 1887.

Editor Manufacturers' Record:

We are considering the question of adding a few more machines and enlarging our finishing department so as to increase the capacity of our factory.

ETOWAH FURNITURE MFG. CO.

CARRABELLE, FLA., Nov. 15, 1887.

Editor Manufacturers' Record:

The Tallahassee, Thomasville & Gulf R. Co. have purchased a Brush arc and incandescent electric apparatus for lighting their extensive saw mills, yards, works, and streets of Carrabelle, Fla. L.

Will Rebuild.

NASHVILLE, TENN., Nov. 16, 1887.

Editor Manufacturers' Record:

We have ordered new machinery by telegraph and will rebuild immediately our coffee roasting establishment. We have our old roasters in running order now.

J. W. THOMAS & SON.

LYNCHBURG, VA., Nov. 16, 1887.

Editor Manufacturers' Record:

I propose to start the manufacture of an automatic wagon break, patented March 1, 1887, by me. NOBLE E. THOMPSON.

Enlarging Cotton Mills.

MONTGOMERY, ALA., Nov. 16, 1887.

Editor Manufacturers' Record:

We are erecting a one-story building 100x72 feet for card room machinery, which is to be transferred from a far-away two-story mill, so that cards can be close to pickers, and the process one of continuation. We are building an addition 22x100 feet for warpers and slanders, so that these can be in line for their proper work; also are putting in a new boiler. These extensions will give us room for 70 per cent. more machinery, which we expect to put in next spring.

ADAMS COTTON MILLS.

To Build Coke Ovens.

FORT PAYNE, ALA., Nov. 14, 1887.

Editor Manufacturers' Record:

The Fort Payne Coal & Coke Company has been organized, capital stock \$100,000. J. M. Ford, Kansas City, Mo., president; U. B. Pearsall, of Fort Scott, Kas., vice-president; E. W. Godfrey, of Fort Payne, Ala., secretary, and F. Moody, of Kansas City, treasurer. The company have capital needed for large and quick development, and propose to erect coke ovens as rapidly as possible. A building association for this vicinity is also proposed.

E. W. GODFREY, Asst. Secty.

Erected Large Grits Mill.

BRUNSWICK, GA., November 15, 1887.

Editor Manufacturers' Record:

We have about completed a pearl grits mill at this place of 300 barrels capacity per day; also manufacture granulated meal, bolted meal, plain meal, plain grits, corn, flour and feed stuff, and the different grades of pearl grits.

JOHNSON, GWINN & CO.

Contemplate Enlarging Water Works.

NORFOLK, VA., Nov. 20, 1887.

Editor Manufacturers' Record:

The city councils are considering several propositions for the increase of capacity of the water works and filtration of the water, but no plan has yet been decided on.

BARTON MYERS.

Canning Factories to be Started.

BUCHANAN, VA., Nov. 18, 1887.

Editor Manufacturers' Record:

I intend to start a cannery or packing house. I expect to pack 150 cases per day. I will manufacture cases until packing time. I understand Mr. Anderson Boozie is going to start a packing house also, about 3 miles south of Buchanan.

B. F. BREEDEN.

Saw Mill.

EARNST, ALA., Nov. 2, 1887.

Editor Manufacturers' Record:

Will start our saw mill about the 1st of December, 1887, and will add some planing machinery about the 1st of February, 1888. Our mill is 35 horse power.

BUCK & PRESTON.

Will Rebuild Mill.

LOWNESBORO, ALA., Nov. 19, 1887.

Editor Manufacturers' Record:

I expect to rebuild at once my saw and grist mill, and gin house next spring.

L. H. MCCURDY.

SILOAM SPRINGS, ARK., Nov. 12, 1887.

Editor Manufacturers' Record:

My new distillery is completed, and will be opened up for business December 1st, 1887. The distillery building proper is 30x30 feet, two stories. The capacity of the distillery at present will be 50 gallons per day. Will add to my business next spring a wooling and carding machine.

CHAS. E. NOYES.

To Develop Timber Lands in Mississippi.

NEW YORK, November 16, 1887.

Editor Manufacturers' Record:

Wm. O. Rogers, of Boston, Mass., Willard G. Underwood, of Hancock, N. Y., and Clarence Gordon, of New York, N. Y., trustees, with the design and intention of forming a company entitled The Yazoo-Delta Land & Lumber Company, with objects to purchase and develop timber lands in the Yazoo-Delta country in the State of Mississippi, to manufacture lumber from such timber, to improve those lands for agriculture, and to farm lease or sell the same, have received certificate of incorporation under Act of the Legislature of New York. The capital stock is \$140,000, in 3,500 shares, each of the par value of \$40. The business will be in part in the counties of Yazoo, Sharkey and Washington, State of Mississippi, with office in the city of New York.

CLARENCE GORDON.

Canning Machinery Wanted.

CRYSTAL SPRINGS, MISS., Nov. 18, 1887.

Editor Manufacturers' Record:

We are organizing canning company at this place, and will build factory for packing tomatoes, peas, beans, okra, peaches and strawberries. Capital stock will be \$25,000 or more. This vicinity ships more fruit and vegetables to Western markets than any other point in this section of the South, and offers superior advantages in that line. The quality of goods produced here is unexcelled elsewhere. A good opening is here offered party with some capital for investment, who understands the canning business thoroughly, and correspondence with that view is invited. Will put in latest improved machinery, and are ready for offers in that line.

C. M. HUBER.

TROY, TENN., November 14, 1887.

Editor Manufacturers' Record:

The contract for the entire construction and equipment of the Troy & Tiptonville Railroad has been let to William Ferguson & Co., with whom I have contracted to build a portion of the line. The road is to be built and operated as an independent line, commencing at the Illinois Central near Martin, Tenn., and running westward to the St. Louis & San Francisco Railroad in Arkansas. The line is to be built by the way of Troy and Redfoot lake in Obion county, crossing the Mississippi near Tiptonville. This line will open up one of the finest timbered sections anywhere in the Southern States, Obion county, through which it will run almost centrally, having now 190 saw mills actively engaged. The country westward from the Mississippi river in Missouri and Arkansas is a very productive one.

M. P. HANLEY.

Tub and Bucket Factory.

WINDSOR, FLA., November 14, 1887.

Editor Manufacturers' Record:

We have erected here a factory 50x80 feet, two stories high, with a 40 horse-power engine, 150 feet of shafting, a tub and pail lathe, and all other necessary machinery for the manufacturing of the above named ware. Have it in operation now, and are turning out some of the finest ware I ever saw.

GRIFFIN & KINDER.

BUCHANAN, BOT. CO., VA., }
November 17, 1887. }*Editor Manufacturers' Record:*

I am trying to make arrangements to buy my boxing in shooks and nail it up here, and to have my cans brought out loose in car, so as to get weight on car. I am going to try and double my canning factory next year and put up more of a variety of goods. I think there will be four or five new canning houses go up in this county this coming season.

HENRY E. BOYD.

Erecting Electric Light Plant and Doubling Gas Works.

JACKSON, TENN., Nov. 12, 1887.

Editor Manufacturers' Record:

We commence to-morrow putting in an electric light plant, "American System," commencing with 50 arc lights, 25 city and 25 commercial, with ample steam power for 100 lights. Our present capacity, 90,000 feet daily of coal gas, is now being used, and we are adding the necessary apparatus to increase it to 60,000. These improvements, with the electric light, will be completed and in full operation by Christmas day.

CITIZEN'S GAS LIGHT CO.

Erecting a Planing Mill.

NEWPORT NEWS, VA., Nov. 14, 1887.

Editor Manufacturers' Record:

I am about finishing a new planing mill which will be fitted out with the latest improved machinery for working wood. Also a new foundry for iron and metal castings. The new dry dock (600 feet in length) now building here, will be completed in about seven months by Simpson & Co., N. Y.

E. C. HILLYER.

New Machinery.

ATLANTA, GA., Nov. 16, 1887.

Editor Manufacturers' Record:

We are putting in 25 H. P. engine and 30 H. P. boiler, 12 extra mixers, 2 mile mills in our own building, which is 40x60 feet. We have not been able to fill all orders promptly as we are situated, and have had to double our power. Think everything will be in perfect order by Jan'y 1st. Business has been good.

F. J. COOLEGE & BRO.

MARSHALL, TEX., Nov. 16, 1887.

Editor Manufacturers' Record:

We expect to manufacture at Birmingham, Ala. Our organization consists of Board of Directors: W. H. Pope, C. A. Ginochio, L. Trice, Jno. W. Parks and P. G. Roquemore. Officers: Jno. W. Parks, Pres.; C. A. Ginochio, V.-Pres. and Manager; P. G. Roquemore, Sec'y and Treas. Are chartered as The Eureka Ratchet Nut Lock Co. Capital Stock, \$100,000.

P. G. ROQUEMORE.

MORRISTOWN, TENN., Nov. 16, 1887.

Editor Manufacturers' Record:

A joint stock company, consisting of J. S. Crump, O. C. King, H. H. Rice, J. B. Jones, et al., has just been formed to manufacture the Idol Door Alarm and Call Bell, a new patent. A charter has been applied for and on its reception the company will organize and enter upon extensive operations.

W. A. JONES.

To Start Canning Factory.

GREEN FOREST, VA., Nov. 21, 1887.

Editor Manufacturers' Record:

A canning company has been organized here, to be known as B. C. Moomaw & Co. Our capacity will be about 20,000 cases.

B. C. MOOMAW.

BURNET, TEXAS, Nov. 14, 1887.

Editor Manufacturers' Record:

I am now grading away for railroad from here to Marble Falls, a distance of fifteen miles, and we expect to have trains running by 1st February, 1888.

F. H. HOLLOWAY.

C. R. MAKEPEACE & CO.
ARCHITECTS and MILL ENGINEERS
PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woolen Mills.

D. W. K. PEACOCK,
Real Estate Agent,
CARTERSVILLE, GA.
Minerals a Specialty.
References to THE HOWARD BANK, Cartersville, Ga.
J. W. RANNEY, Atlanta, Ga.

188,000 acres mineral rights, including coal and oil, and coal, oil, gas and minerals, in 2-4 East-City, on projected railroad; \$1 to \$3 per acre. Well timbered coal lands, \$2 to \$5 per acre. 15,000 choice poplar trees, \$1 per tree. 1,000 walnut, white oak and cherry trees cheap. Titles perfect. W. J. HORSLEY, Whitesburg, Ky.

Manufacturers' Bureau of Fort Smith, Ark.

Invite correspondence and propositions from manufacturers with a view to locating at Fort Smith. Fort Smith is the center of an immense semi-anthracite coal, lumber, iron and cotton region, with railroad facilities giving close connections with the markets of Kansas, Texas, Missouri, Indian Territory and Arkansas. Population in 1880, 7,500; in 1886, 14,000; in September, 1887, 18,000.

NORTE TEXAS, YOUNG COUNTY.

Elevated, pleasant, healthy. Its people enjoy and farmers and stockmen benefit from three to five months more of working and farming and no less number of winter stock-feeding days in every year than those of the Middle States. Send address for circular of ranch, places of various size, investment and farming lands.

E. S. GRAHAM,
Graham, Texas.**Gallatin, Tenn., Cotton Factory****FOR SALE.**

Factory is situated immediately on Chesapeake & Nashville R. R., and right in city of Gallatin, on L. & N. R. R. Factory has 300 horse power engine, 196 looms, with sufficient machinery to run the looms to their full capacity; never failing water for all purposes. Machinery all in good running order. All machinery automatic and of latest improved kind. Makes from 7,000 to 7,500 yards of goods per day. Looms 4-4, but arranged to make, when desired, either 5 or Onaburg. There is also attached to factory merchant grist mill; in addition large double brick house, also eleven cottages for operatives. Property cost \$19,000. Will be sold at a bargain. Machinery will be sold separately if desired. There are some 30 acres of land adjoining factory. For particulars address

BANK OF GALLATIN,
Gallatin, Tenn.**REAL ESTATE IN A Booming Alabama Town FOR SALE.**

Three Hundred Choice Business and Residence Lots in the CITY OF ANNISTON.

This property is the best in the city, and having been bought before the boom, will be sold at prices affording investors a rare opportunity to make certain and handsome profits. Address

F. M. HIGHT, Anniston, Ala.

Farm, Mineral AND Timber Lands.

Parties desiring to obtain **First City Property** in a growing manufacturing center, and **Truck Farms** of superior excellence in close proximity to the markets of the country, and **Mineral and Timber Lands** of great value, will do well to consult Messrs. A. B. Whiteaker & Co., of Bristol, Tenn. **Mineral and Timber Lands** controlled by us are within a radius of fifty miles of Bristol, and are pronounced by experts to be the most valuable in the sections of East Tennessee and Southwest Virginia. The **Timber Lands** are of virgin growth and in close proximity to the railroad. The **Mineral Lands** are the richest in this section of the South. **Capitalists and Prospective Settlers**, as well as **Home Seekers**, will do well to consult us regarding our lands, which we offer at the most reasonable prices. We will be glad to furnish any or all kinds of information regarding lands in this section of the State. Address

A. B. WHITEAKER & CO.
BRISTOL, TENN.**COPY OF ORDINANCE**

Passed by the Council of the Town of West Point, Virginia, on the 21st day of April, 1879, and re-enacted and approved on the 22d day of March, 1887.

Be it ordained by the Council of the Town of West Point, Va., that any party or parties investing in property in this town for the purpose of conducting any enterprise, such as manufactories, packing houses, &c., and actually operating the same, they shall be exempt from all corporation taxes upon such property, and all machinery and improvements thereon, for the term of ten years from the purchase of such property.

It is also ordered that the Mayor is hereby instructed to advertise this ordinance in the "MANUFACTURERS' RECORD," a paper published in the City of Baltimore, Md.

J. WILKINSON, Mayor.

Coking Coal and Iron in South West Virginia.

BRISTOL, TENN., Nov. 17, 1887.

Editor *Manufacturers' Record*:

The result obtained by coking several carloads of coal from the mines of Scott county on the line of the South Atlantic & Ohio Railroad, distant but fifty miles from Bristol, and coked at the ovens of the Tennessee Coal & Iron Co., shows as follows:

Moisture.....	9.35
Fixed carbon.....	91.36
Ash.....	8.29
Sulphur.....	0.68

Its physical structure is most excellent (I send you by mail a sample). Its strength is remarkable and its general appearance very much like the best brands of Connellsville

nine tenths of them will not have to be carried 10 miles to reach the furnaces. The Stock Creek Coal & Iron Company have several thousand acres of coal (analysis of coke from which is given above) which they would, so I am creditably informed, lease on a very low royalty to reliable parties who may desire to engage in the coke business. Very liberal inducements are offered to parties who will erect an iron furnace at this point, aggregating in actual cash value over one-half the entire cost of a 100-ton furnace plant.

The best judges estimate that Bessemer pig can be produced here at a cost of less than \$12 per ton.

I will not in this communication say any-



PATENT BOILER TUBE CUTTER.

coke. Recent investigations and extensive openings along the line of the railroad show vast deposits of brown hematite iron ore lying alongside of the railroad in a continuous stratum twelve to nineteen feet thick. Parties who are making arrangements to erect a 100 ton furnace have examined these ores, selecting samples so as to represent the run of the mines, and have had them assayed, with the following results:

Brown Hematite Ore.

Metallic iron.....	58.80
Silica.....	4.86
Sulphur.....	0.02
Phosphorus.....	trace

Red Hematite Ore from McDowell's Land.

Metallic iron.....	48.40
Silica.....	10.00
Phosphorus.....	trace
Sulphur.....	trace

Red Hematite Ore from Wisling Tract.

Metallic iron.....	56.00
Silica.....	4.08
Sulphur.....	0.008
Phosphorus.....	0.001

Coal from Big Stone Gap, 8 foot seam.

Moisture.....	1.60
Volatile matter.....	38.61
Fixed carbon.....	57.69
Ash.....	2.30

It will be seen that these ores are all steel ores and of remarkable purity, and when we take into consideration that they lie immediately on the line of the railroad, where all the conditions for mining and loading them in cars are most favorable, and that the thoroughly tested coking coals of Scott county and of Big Stone Gap are less than ten miles distant, it becomes apparent that iron and Bessemer pig can be produced here at a far less cost than the materials to make a ton of pig iron can be furnished in Pennsylvania or Ohio or any other point in the United States with the exception of the Birmingham district. The advantages which this district enjoys over the Birmingham district lies in the fact that we have the same ores that district has, and these steel ores besides, and to the equally important fact that we have inexhaustible supplies of a far superior coal for coking purposes.

Then there is the additional advantage that we are but 30 miles from the famed Cranberry iron mines, which are valued so highly for steel making and for mixing with other ores. In this district every grade of iron and steel can be produced, and none of the materials required in its manufacture will have to be transported 50 miles, and

thing about the various industries which are progressing in this place. At some future time I may give you a brief description of them, and also point out the especial advantages this section, from its climate, water powers, unequalled forests and its fertile soil, present for the employment of energy and capital. I will only say that there is wanted very badly a competent brickmaker with capital sufficient carry on the business on a large scale, and several first-class carpenters and builders.

Baughman's Patent Boiler Tube Cutter.

This handy little tool is designed for cutting off old tubes for safe ending, inside the tube sheet, and for removal and cutting off the ends of tubes to proper length after they have been placed in the boiler and expanded at one end. This effects a great saving in time, and avoids the danger of splitting the tube, as often occurs when the chisel is used. It dispenses with all marking and taking out tubes after they have been put in the boiler and marked to cut to length, as is generally done with locomotive tubes. With this cutter it is only necessary to put them in once, expand in fire-box and cut to length. It makes no difference how uneven the tube sheet may be, the cutting is gauged from the tube sheet and the ends will all be an equal distance from it. There is nothing about this cutter to wear out easily or get out of order. The tool is made of steel and hardened. It has three revolving cutters that cut from the inside of tube. While cutting the bearing is all on these wheel cutters and none on the stock. It works easily and rapidly. The cutters are very inexpensive to replace. 300 2-inch tubes have been taken out in ten hours at the Atlanta shops of Richmond & Danville Railroad Co. Different sizes are built for the various sizes of boiler tubes. Messrs. Pedrick & Ayer, proprietors L. B. Flanders Machine Works 1025 Hamilton street, Philadelphia, Pa., are the manufacturers.

THE BALTIMORE MANUFACTURERS' RECORD is doing wonders for the "New South."—Pulaski (Va.) News.

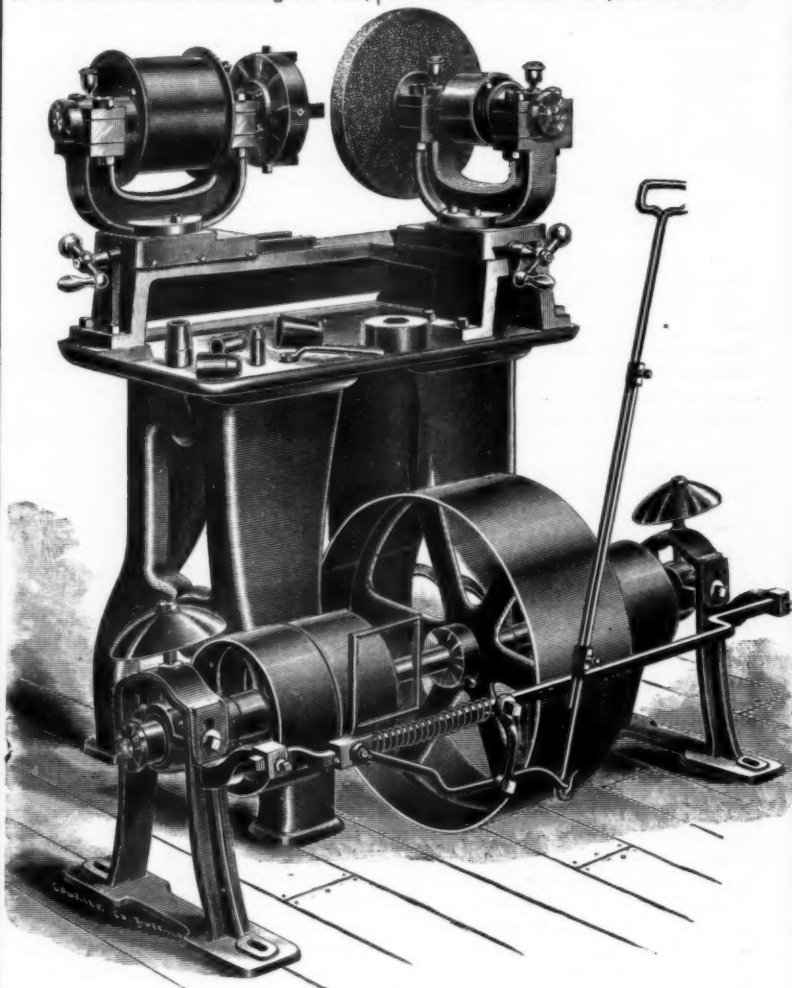
Some Remarkable Band Saw Work.

BOSTON, November 25, 1887.

"Visitors to Coney Island will see in the Sea Beach Palace Exposition some wonderful work done by a man who works out the most delicate articles with a band saw nineteen feet long, and revolving at the rate of over a mile a minute. Upon this machine the skilled operator recently sawed out four chairs, all complete with legs and backs, but so small that four were placed on the end of a lead pencil at one time. Then a dozen knives and forks of the most diminutive size were made and placed around the lead pencil. So small were they that, although the entire dozen were placed around the pencil, not one of them touched the other. Then the operator trimmed his finger nails in the huge saw as cleverly and as easily as one could do it with a penknife. Wetting his thumb, he pressed the ball of it into some sawdust, and then sawed the sawdust off the thumb without scratching the skin,

there being several good ones on the market, I can say that as regards band saw blades I have a preference, and since 1883 have used only the Simonds blade in exhibition work. Their blades are made in such a way that I can always count on them, and, sawing only in public, I cannot afford to take any chances whatever of having my tools give out or break. Whereas all other band saw makers, including makers of the French blade, punch the teeth out of their blades, the Simonds band saw is made by milling the tooth into the blade. In punching the teeth out of a narrow band saw blade, the blade must necessarily receive a strain; with the milled tooth blade, however, this strain is entirely done away with. While at Coney Island I wore some of these blades down so narrow that I could not hold them in the filing vise any more, and was forced to lay them away. I have a number of the Simonds saws worn too narrow for any kind of use, and they have not broken at all yet.

I do not know who wrote the article above quoted, but, it having fallen into my hands, I take this opportunity to thank the party for calling attention to my skill as a band sawyer. As far back as '78 I used these



MACHINE FOR GRINDING PUNCHES AND DIES.

yet a single nervous twitch of the arm would have cost him a hand. All sorts of curious puzzles are turned out with astonishing rapidity from all sorts of misshapen blocks of wood. Even articles of clothing, as thin and flexible as cloth, are worked out by this magician from little pieces of wood with his big saw. The cap he works in was sawed out of over 1,000 pieces of wood, no two of which are the same size or shape."

The above article, which appeared in the October issue of the *Lumber World*, has attracted considerable attention. Since September 26th last I have been sawing at the Mechanics' Fair, in Boston, and am giving the same exhibition I gave at Coney Island, attracting thousands of people daily, some of whom are interested merely as sight-seers, while others watch my work and for chances to question me about it.

Although a man may be thoroughly acquainted with the use of band saws, he cannot accomplish the result I do unless he is equipped with the proper tools. Without giving my preference of band saw machines,

saws, 28 to 30 gauge, for slabbing ivory tusks, and my success in this work was almost entirely owing to this same material.

R. MCCHESNEY.

The Original Mohawk Dutchman.

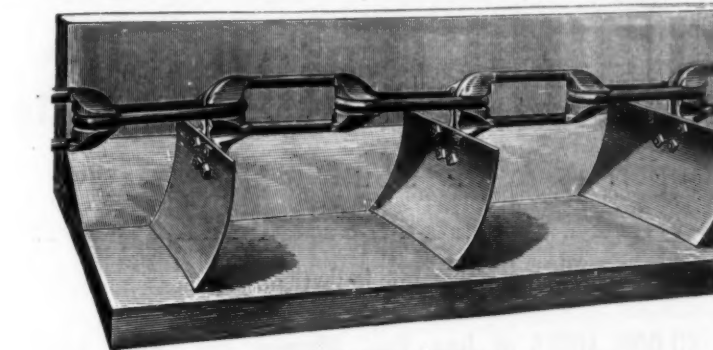
Machine for Grinding Punches and Dies.

The engraving represents a machine for grinding punches and dies, such as are used in making bolts, rivets, screws and a large variety of square or circular pieces requiring one or more finished faces. It works equally well on hard steel, chilled iron or softer metals. One of the heads carries a universal chuck for holding and revolving the pieces to be ground, and the other an emery wheel. Both of the heads run on a dovetailed track, and are fed in and out by a screw, making it so that convex, concave or flat faces can be well and quickly ground. A stop can be arranged so that the work can be ground to any desired thickness, or several pieces ground to the same thickness. It is manufactured by the Springfield Glue & Emery Wheel Co., Springfield, Mass.

Long Conveyors.

The accompanying cut shows a section of one of the long conveyors manufactured by Burr & Dodge, of Baltimore, Md., and Philadelphia, Pa., also the Link-Belt Machinery Co., of Chicago, Ill. The chain used is Dodge chain, named after the inventor. Its distinctive feature is the introduction of bearing blocks, which serve to largely increase the bearing surfaces, and afford ample driving surface for the teeth of the sprocket wheel, which do not touch the chain, thus relieving it from all wear. The flights or scrapers, it will be noticed, are concaved in both surface dimensions, thus saving weight, as scrapers one-eighth of an inch thick on this principle are as strong as flat scrapers five-sixteenths of an inch in

thickness. These scrapers are made in a number of sizes, according to the capacity required, and are generally placed about two feet apart. The capacity of these labor-saving machines is surprising. Running at the speed of from 75 to 100 feet per minute, with scrapers 8 inches by 24 inches, they will with ease deliver coal, culm sand, ore, sawdust, &c., at the rate of three tons per minute at any point up to a distance of 800 feet or so. The troughs for these conveyors are made in various shapes, according to the quality of the material to be handled. In some cases the sides are made very flaring; in others at right angles to the bottom, and again some have no sides at all, each serving for some special duty. In some cases the load has to be dumped at intermediate points, which is accomplished by having trap-doors in the bottom of the trough, which, when opened, allows of the load falling through at the desired point.



SECTION OF LONG CONVEYORS.

These conveyors are giving entire satisfaction in numerous collieries, phosphate works, coal-yards, mines, &c., and are the means of saving a large amount of labor. The manufacturers furnish estimates, with full working drawings of work ordered, and fully guarantee the successful operation of same. If it is necessary to change the direction of a part of the conveyor, it may be done by placing a wheel horizontally at the desired point and allowing the chain to bear on it in going around the curve, the flights passing under the wheel. The return chain is supported by special idler wheels placed at the proper distance apart. The bottom of these troughs are lined either with iron, glass or wood, according to the nature of the material to be carried.

Our splendid system of graded schools is deservedly eliciting the admiration of everybody, and many of the well-to-do farmers of this and adjoining counties are preparing to move their families into the city to get the benefit of these schools.

It has taken us a long time to learn how to build a city, but we have found it at last, and, better still, we are building it and we don't intend to act the fool about it. We are going to build it steadily, firmly, substantially. It will not be a mushroom growth, but something that any man who has had a hand in it may be proud of.

THE Rome Land Co., of Rome, Ga., have issued a pamphlet setting forth the advantages and attractions of that beautiful town and the adjacent country. That Rome has much of which it may justly boast can be readily understood when it is known that Floyd county, of which Rome is the county seat, took 22 first prizes at the Piedmont Fair in Atlanta, including the grand prize of \$1,000 to the county making the largest and best display of agricultural products, first prize for fullest and best display of mineral and forest products of any county, and the first prize for best bale of cotton, best exhibit of hay, best bushel of corn, wheat, oats, sweet

potatoes, etc., etc. Floyd county also took 14 second prizes. Surely 37 prizes at one fair is a commendation of merit rarely equalled. Those who contemplate seeking a Southern location, either on account of business or for health, will find this pamphlet well worth reading.

The Aurora Lamp.

Keeping pace with the progressive improvements of the times, the Lamp & Brass Works of W. J. Gordon, Cleveland, Ohio, last year introduced the lamp wonders of 1886, viz: The Cleveland, Harvey and Orient lamps, which for their respective purposes and unquestionable merits, rapidly achieved an excellent reputation.

Notwithstanding these lamps were introduced so very late in the season of 1886, and after the majority of jobbers had already placed their contracts, many of the best houses throughout the country adopted

merits of these respective lamps, and the variety of designs and styles in which they manufacture the same, write to the Lamp & Brass Works of W. J. Gordon, Cleveland, Ohio.

CHROME STEEL MANUFACTURE.—The growth of the Chrome Steel Works, located in Brooklyn, N. Y., has surprised every one acquainted with the difficulties met with in the past in establishing works of this class in the Northeastern States. It was only last spring that we chronicled the enlargement of their works and the substitution of gas for coal in their heating furnaces, necessitating the removal of their old furnaces and the putting in of "regenerators" in their stead. This new plant was made complete in every respect, even to the necessary apparatus for the manufacture of the gas used, and increased the productive capacity of the works two-fold. We have now to record another advance step, the firm being engaged at the present time in the construction of additional rolling mill facilities under cover of a structure 75 by 100 feet. The Chrome



THE AURORA LAMP.

them, and in no instance, it is said, have there been anything but the most gratifying results.

Prompted by this success this company have added a variety of new designs and patterns of their Cleveland lamp, and also modified the size of the Harvey burner so that it is now applicable to the regular No. 3 collar, thereby enabling the trade to adapt it to the many styles of fancy founts and vases already in the market.

In addition to these they also call attention to their new lamp—the Aurora—one style of which we illustrate, which they claim to be a decided improvement over the Rochester and others in its elevating and re-wicking devices, as also in its steadiness and volume of light.

They still continue to manufacture extensively the study and library lamps, both single and double styles, which are so well known to the trade as to need no commendation.

For further particulars concerning the

Steel Works are the well known manufacturers of the Chrome steel adamantine shoes and dies for stamp mills, which have of late years, it is said, almost entirely supplemented the old-fashioned iron shoe and die in the mining regions of North and South America. They also make all descriptions of cast steel, as well as tool steel in all the salable shapes and sizes. Their combination plates of alternate layers (5 ply) iron and steel, being practically burglar proof, have met with a great sale among builders of banking houses, safe deposit vaults, jails and other structures.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

MORRISTOWN, TENN., is one of the prosperous towns of the South that is moving steadily along without much boast of its progress. As so often told in our columns, it is admirably located in that beautiful country—East Tennessee—and possesses most excellent advantages for industrial enterprises. The Morristown Gazette, in a late number, says:

Morristown is not on a boom, but in the matter of progress and development and rapid building few cities in the South are ahead of us. New houses are going up in every quarter, and hundreds of people are

DECATUR, ALA.

Offers outside investors better inducements to locate than any other

 CITY IN THE SOUTH 

AS A CITY OF

Mammoth MANUFACTURING Enterprises,

She has few equals and no superiors in the South.

There have been located at Decatur in the last four months the following Industries :

THE DECATUR LAND, IMPROVEMENT & FURNACE COMPANY. Has 50,000 ACRES of Iron, Coal, Mineral and Timber LANDS.
The Louisville & Nashville Railway Car Works. Cost of Buildings, \$300,000.

Charcoal Company's plant, costing \$120,000.
A seventy-ton Charcoal Iron Furnace, costing \$190,000.
A one hundred-ton Blast Iron Furnace, costing \$225,000.
The Decatur Iron Bridge Construction Company; cost of plant, \$100,000.
The American Oak Extract Company's plant, costing \$60,000.
Ivens & Sons Steam Boiler and Engine Works, costing \$100,000.
Morse Cotton Compress plant, costing \$60,000.
Decatur Lumber Company, Saw and Planing Mills, costing \$50,000.
Berthard & Co., Sash, Door and Blind Factory, cost \$15,000.
The Decatur Street Railway Company.
The Telephone Company.
Brush Electric Light Company, cost \$10,000.
The Ironton Wheelbarrow Company, cost \$25,000.
Howland & Co's Water Works System, costing \$200,000.
Bleymeyer Artificial Ice Company, cost \$10,000.
Four Mammoth Brickyards.
Jones, Poley & Co's Lumber Yards.
The Hoosier Mills & Building Company.
The Gate City Sash & Door Company.

Arantz Bro's Mills and Lumber Yards.
Grant & Co's Furniture Factory.
Southern Lumber Company.
H. S. Freeman's Mills and Lumber Yards.
The Alabama Farmer's Friend Fence Machine Company.
The Decatur Artificial Stone Company.
Decatur Chain and Architectural Iron Works, capital \$100,000.
Natural Gas Company, capital \$200,000.
First National Bank, capital \$100,000.
The Exchange Bank of Decatur, capital \$100,000.
Merchants' Insurance Company, capital \$100,000.
Decatur Building Association, capital \$300,000.
Decatur Building Company, capital \$1,000,000.
Buchheit's Bottling Works.
Decatur Printing Company.
Two daily papers, three weekly papers.
Two hotels are building—one \$60,000, one \$300,000; the largest in the South.
Grand Opera House, \$100,000.

THERE ARE OTHER

Mammoth Enterprises

Locating here, and contracts are being made with some of the most extensive industries in the United States.

Decatur is the Healthiest city in Alabama, the death rate among whites for 1886 being only 11 in 1,000.

Decatur Land, Improvement & Furnace Company.

E. C. GORDON, President. H. G. BOND, Vice-Prest. and Gen. Manager. W. E. FOREST, Secretary.

This Company has been pre-eminently successful in promoting the interests of the city of Decatur.

CORRESPONDENCE SOLICITED WITH PARTIES SEEKING LOCATIONS.

ALABAMA'S GREAT MINERAL WEALTH

SURROUNDS THE

★ CITY OF TALLADEGA, ★

Which, according to statistics, is the **MOST HEALTHFUL CITY IN ALABAMA**, and the County Seat of Talladega County.

THE CITY HAS A POPULATION OF 5,000, AND ITS POPULATION IS RAPIDLY INCREASING.

TALLADEGA is on the main line of the E. T. V. & G. Railroad, the A & A. Railroad, and is the present terminus of the T. & C Railroad. Work is rapidly progressing on the Birmingham & Savannah Air Line Road, between Birmingham and Savannah, and within twelve months this road will be completed via Talladega from Birmingham to Savannah, which will place Talladega on the direct line from Birmingham to deep water on the Atlantic, making

TALLADEGA ONE OF THE BEST DISTRIBUTING POINTS IN THE STATE.

THE CITY HAS

AN EXCELLENT SYSTEM OF COMMON GRADED SCHOOLS,

With a scholastic population of 500, and **THE MOST COMMODIOUS AND ATTRACTIVE PUBLIC SCHOOL BUILDING IN THE STATE.** The main building is a three-story brick, slate roof structure, well ventilated, heated by steam; has accommodations and seating capacity for 500 pupils. This school is owned and sustained by the city. All branches of English literature, foreign languages, music, the sciences and art, are taught for a nominal tuition. Among other educational institutions are the following:

SYNODICAL FEMALE INSTITUTE, Property valued at \$50,000.

D. D. & B. INSTITUTE, Property valued at \$150,000.

BLIND INSTITUTE, (in course of construction,) property valued at \$150,000.

FOSTER COLLEGE, property valued at \$150,000.

No other city in Alabama has so many educational institutions and so many public buildings.

← TALLADEGA HAS THE MOST COMPLETE SYSTEM OF WATER WORKS IN THE STATE. →

The stand pipe has a capacity of 175,000 gallons, and into this reservoir a supply of fresh, clear, pure water is pumped every day from a large spring located in the heart of the city, which discharges over 2,000,000 gallons per day. The gravity pressure from this system is 90 pounds to the square inch in the business portion of the city. The city has broad streets, well macadamized and shaded with beautiful trees, and is well lighted with a **SUPERIOR QUALITY OF GAS.** Sixty fire plugs and forty gas lamps protect against fire and illuminate the streets.

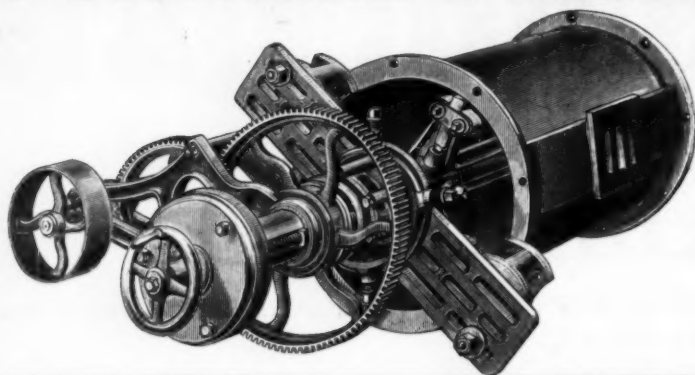
A LARGE FURNACE PLANT gives employment to thousands of hands, and makes a high grade of chilled car-wheel iron from ores, limestone and coal within ten minutes haul by rail, or an hour's haul by wagon. **FOUR LARGE LUMBER MILLS**, with an aggregate daily capacity of 200,000 feet of lumber, cut from the long-leaved yellow Pine of this country. **FOUR BRICK YARDS** are in active operation. A SASH, DOOR and BLIND FACTORY, a FOUNDRY, MACHINE SHOP, FLOUR MILL, COTTON-SEED OIL MILL, and various other industries are in successful operation, and the TALLADEGA ICE CO. cools the thrifty population with pure ice at 50 cents per hundred. Another large furnace plant will be completed within the next ten months. A Spoke and Handle Factory and many other industries are projected, with a view to early completion.

Taxable property has increased 100 per cent. within the past twelve months. The rate of taxation is limited in the city charter to half of one per cent., and the city offers an exemption from taxation to all manufacturing enterprises for a period of ten years. The county of Talladega supplies more crude material, in the way of minerals and timber, than any other county in the State. Almost within the corporate limits of the city are extensive deposits of the highest grades of limonite ores, yielding 50 to 58 per cent. metallic iron, with only a trace of phosphorus, and limestone abounds in the greatest abundance. Coal is within twenty miles by rail.

THE TALLADEGA LAND & IMPROVEMENT CO. owns 5,000 lots suitable for residences, business and manufacturing, in and adjacent to the city. Lots are donated to manufacturing enterprises, and liberal inducements offered to actual settlers. SPRING LAKE PARK is owned by this company, and it is being made the most attractive resort in the State. The lake covers an area of seven acres, and is a beautiful sheet of clear spring water. Parties seeking a healthy climate, free from malaria and epidemics, and a prosperous city, are invited to visit Talladega. Address for maps, etc.

The Talladega Land & Improvement Co., ⇄ Talladega, Ala.

PORTABLE CYLINDER BORING MACHINE



This machine is designed for re-boring in present positions all makes and sizes of steam engine cylinders, pumps, steam hammers, blowing engines, air compressors, mining and hoisting engines, corliss valves, hydraulic and steam hoists, heavy housings, large wheels, etc. It will bore with one or both cylinder heads off, either vertical, horizontal, or inclined on the engine bed, or laying on the ground. It is so constructed that the piece being bored serves as the bed or support of the bar. It is only necessary to take off the cylinder head and remove piston, when the cylinder can rapidly and accurately be bored out. This saves breaking the steam joints, bolts, etc., and often cylinder can be re-bored in less time than it would take to remove cylinder from its bed.

PEDRICK & AYER,

1025 HAMILTON STREET, - - - PHILADELPHIA, PA.

E. C. HUXLEY, Pres.

T. L. STURTEVANT, Treas.

THE STURTEVANT MILL.

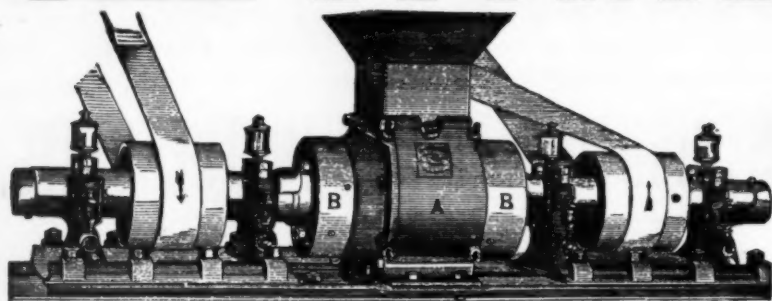
ROCK CRUSHER

—AND—

PULVERIZER COMBINED.

FOR GRINDING AND CRUSHING

ores, Phosphates, and Other Hard Substances.



Developing an entirely NEW PRINCIPLE. Avoiding the usual wear and tear of machinery, and doing in a much more rapid and thorough manner the work of a crusher and stamp mill combined. The attention of all those interested in the crushing or grinding of Ores, Phosphates, and other hard substances, is called to the absolute originality of this invention. The expense of wear and tear is 75 per cent. less than any machine ever invented. No expensive foundations. No skilled labor required. One mill equal to a 30-stamp battery and crushers combined, occupies space of 12 feet by 4 feet in width. These machines are in operation on a large scale. Every mill warranted to do all claimed for it. Send for catalogues of this wonderful machine and full information.

FRASER & CHALMERS, Sole Manufacturers,

45 Fulton Street, Chicago.

2 Wall Street, New York.

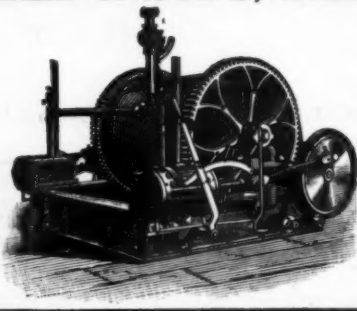
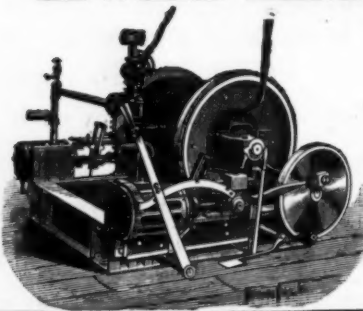
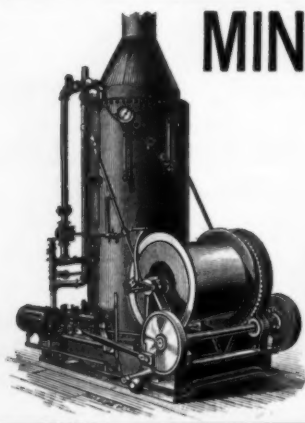
11 Calle de Juarez, Chihuahua, Mexico.

423 Blake Street, Denver.

STURTEVANT MILL CO., 89 MASON BUILDING, BOSTON, MASS.

MINING & CONTRACTORS' HOISTING ENGINES

EDWARD KENDALL & SONS, Cambridgeport, Mass.



Double or Single Cylinders.
Double or Single Drums, Straight or Cone Shaped, Smooth or Grooved, for Rope.
Fast Drums with Reverse Link.
Friction Drums without Link.
Friction Drums with Link.
Double or Single Gear.

BOILERS, TANKS, HEATERS.

General Plate and Sheet Iron Work.

Send for Catalogue C.

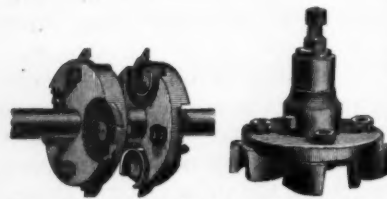
THE SHIMER MATCHER HEADS

The Cheapest! The Strongest! The Most Durable!

AND YET THE LIGHTEST AND EASIEST RUNNING MATCHER HEADS IN THE WORLD. UPWARD OF 25,000 SOLD.

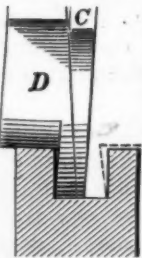


FLOORING MATCHER HEADS.



BOX BOARD MATCHER HEADS. JOINTER HEAD.

The Bits are arranged in upper and lower series, and secured to a Head having seats alternately inclined for the purpose of giving the side clearance to their cutting points. This explains why these Bits hold their shape and turn out standard work until used up; the entire circle of Bit being tool cutting edge. This diagram represents a Bit (D) in the position it occupies when making a cut; the Bit (C) which follows to complete the work, is given in outline.

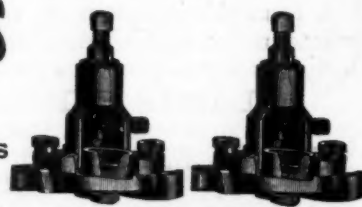


Samuel J. Shimer,

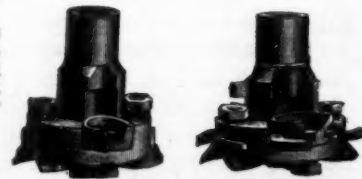
This explains the division of cut and the easy working of the tool. They finish hard, cross-grained and knotty lumber neatly, showing clean cut edges, and often save their cost in one day's run.

We also make SHIP-LAP HEADS JOINTER HEADS, DADO HEADS, SASH HEADS, DOOR HEADS, COPE HEADS, and Heads for any special work where a perfectly uniform pattern is required. Send for Descriptive Circular.

Milton, Penn.



SHIP-LAP HEADS.



DOOR HEAD.

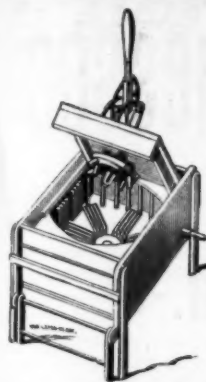
SASH HEAD.

BUY "THE NEW SOUTH."

PRICE \$2.50.

HANDSOMELY BOUND IN CLOTH.

MANUFACTURERS RECORD CO., PUBLISHERS.



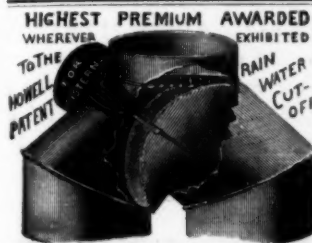
"THE OLD AND ONLY RELIABLE"
LATEST IMPROVED FORT WAYNE
WESTERN WASHER.
SOLD ENTIRELY ON ITS MERITS.

We have furnished these machines to an appreciating public for the past twelve years, during which time the demand for them has increased steadily and rapidly.

Each Machine is Warranted to give Perfect Satisfaction

We want this machine represented in every city and town, and will give liberal discounts to dealers, and will guarantee the sale and satisfaction of them. Price, No. 1 Family Size, \$8; No. 2, Large Family, \$9; No. 3, Hotel Size, \$10. Write for Catalogue and Terms to the

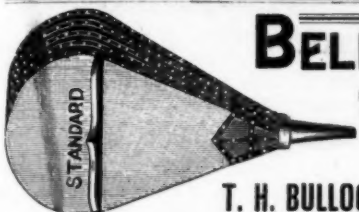
HORTON MFG. CO., Fort Wayne, Ind., U. S. A.



HOWELL'S PATENT
Rain Water Cut-Off.

For turning the water into or off the Cistern by merely moving the lever from one side to the other. It is made of tin, and is light, cheap and durable. Write for circulars and prices to the manufacturer. Mention this paper.

G. W. HOWELL, Covington, Ky.



BELLOWS, FORGES,

Tools for Blacksmiths, Wagon

AND BOILER SHOPS.

T. H. BULLOCK BELLOWS & FORGE CO.

CLEVELAND, OHIO.

Write for Prices.

Covert Manufacturing Company.



The Greatest Emporium in the World for the best Snaps, Chain, Rope and Web Goods, &c., manufactured, is the celebrated works of the

Covert Manufacturing Co. West Troy, N. Y.

For Sale by all Jobbers Handling this Class of Goods.

D. SAUNDERS' SONS,

MANUFACTURERS OF THE ORIGINAL

TRADE **I.X.L.** MARK.

Pipe Cutting and Threading Machine.

BEWARE OF IMITATIONS. None genuine without our Trade Mark and name. Also

Patent Wheel Pipe Cutter

STEAM AND GAS FITTERS' HAND TOOLS.

Pipe Cutting and Threading Machine

For Pipe Mill Use a Specialty.

Send for Catalogue B.

YONKERS N. Y.

NIAGARA STAMPING & TOOL CO.

BUFFALO, N. Y.

MANUFACTURERS OF

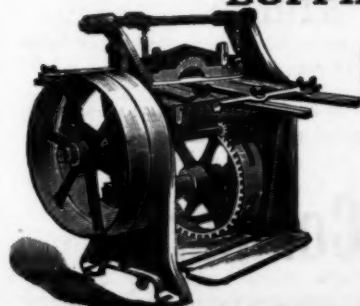
FOOT AND POWER SHEARING MACHINERY

AND

Presses and Dies for Working Sheet Metal.

Power Chopping Shears for Nail and Tack Plates, and for Cutting Steel for Outlets, etc., Works.

Tinners' Machines
AND TOOLS OF ALL KINDS.



Corrugating and Curving Rolls for Roofing, Siding and Ceiling. Squaring, Circle, and Hand Shears. Send for our complete, illustrated Catalogue and Price List, and Mention this paper.

STEEL RAILS

COMPLETE OUT-FIT FOR

Logging, Mining and Plantation

RAIL AND TRAM ROADS.

Light Sections Rails and Spikes in stock.

Locomotives, Logging Cars, etc.

NEW AND SECOND HAND.

HUMPHREYS & SAYCE,

OFFICE NO. 1 BROADWAY, N. Y.

IMPORTANT
To Wharf Owners.

THE PATENT PILING PROTECTOR CO., BRUNSWICK, GA., is prepared to protect piling from the Teredo and other Marine Pests in any Harbor in the United States, and will erect its plant, which is inexpensive, in any Harbor where a contract is offered, and prepare piling from the timber near at hand. The process is thoroughly effective, indestructible in salt water, and protection for ten years guaranteed. Is fully protected by letters patent. Has been tested for six years; is better than metal covering; as good and for piling in some respects better than creosoting; costs less than one-half as much as metal covering or creosoting. Circulars fully explaining process will be sent upon application. Correspondence solicited.

Address,
C. P. GOODYEAR, President,
BRUNSWICK, GEORGIA

THE OHIO

FAMOUS **ENSILAGE**

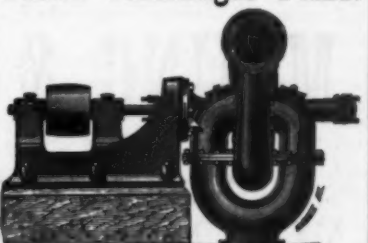


They are more substantial, easier to operate, have greater capacity, are less liable to accidents than any other Cutters. We build nine sizes, six for power, furnished with or without carriers. Our illustrated catalogue, containing also valuable information on the subject of Silos and Ensilage, sent free. Liberal discounts and terms to dealers. Write for prices

Silver & Deming Manufacturing Co.

SALEM, OHIO.

WEBBER'S
Belted Centrifugal Pump.



Giving greater efficiency than any other Centrifugal Pump in the market. Send for catalogue.

LAWRENCE MACHINE CO.

Mason Building, - - - BOSTON, MASS.

New York Office, 17 CORTLANDT ST.

Agents—J. Post, Jr. & Co., Boston, Mass.; Fairbanks & Co., St. Louis, Mo.; H. F. Gregory & Co., San Francisco, Cal.; R. W. Buchanan, Montreal, P.Q.

THE F. F. ADAMS CO., ERIE, PA.

—MANUFACTURERS OF—

Hardware Specialties and Household Articles,



CYCLONE MOUSE TRAP.

Agents Wanted in every Southern Town and City. Hardware Dealers write for Catalogue.

STEP LADDERS,
WRINGERS, TRUCKS,
Cork Pullers,
MOUSE TRAPS,
Steam Flue Cleaners,
Etc., Etc.

Double Floor Circular Saw Mill

FOR SALE.

Built to order; never unbored since came from shop. Cost three thousand dollars; sell for fifteen hundred. All modern appliances for sawing seventy feet in length. Shafting, pulleys, endless chains for hauling logs, carrying lumber slabs and sawdust, etc. Carriage in parts all 55 feet; extension to 70 feet. Reason for selling, party died. Any one contemplating buying will do well to correspond with

L. GODFREY & CO.,

MACHINERY AGENCY,

26 Exchange Place, Providence, R. I.

Dealers in Cotton, Woolen, Iron and Wood-Working Machinery, Steam Engines and Boilers, &c.

SAWS

Your Gold Medal at New Orleans,

1885.

Circular Saws, solid and inserted point. Crescent Ground Cross Cut Saws, Gang, Mill, Mulley and Drag Saws, Milled Tooth Band Saws. Planer Knives, Paper Cutting Knives, Leather Splitting Knives. Knives made to any pattern furnished.

Simonds Mfg. Co.

Cor. Canal and Washington Sts.

Chicago, Ills.

FITCHBURG, MASS.

SAWS
SEWING
MACHINE

Sweet's Patent Measuring Machine.



Measuring Screw 10, 16 or 20 Threads to the inch, graduated to read thousandsths or 32nds without calculation.

IT WILL PAY YOU TO USE THIS MACHINE

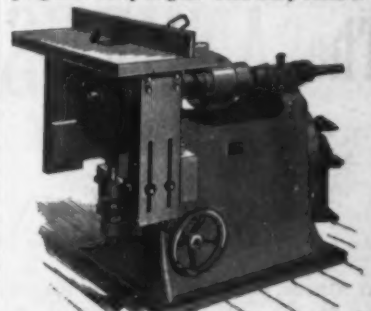
Upon COMMON WORK for the TIME it will save. Upon FINE WORK for the ACCURACY it will secure. It is the only Micrometer that will not lose its accuracy by use.

We will send one of these machines to reliable parties on trial. Those who use it would not be without one for many times its cost. Address,

STRAUGHN TWIST DRILL CO., SYRACUSE, N. Y.

Emery Wheel Surfacing Machine

Base of machine has sufficient flare to give solid floor foundation. Table is so supported that it cannot spring under heavy weights. Solid emery wheels or



wood covered wheels can be used, and table is easily adjusted to wearing away of wheel. Machine is well proportioned and thoroughly built. Write for circular. Springfield Glue & Emery Wheel Co., Springfield, Mass.

ATHENS, East Tennessee

THE COMING

→ Iron and Manufacturing City of the South. ←

Athens is the county seat of one of the most fertile counties in East Tennessee. The health of the city is unsurpassed, and is **ABSOLUTELY FREE FROM ALL MALARIAL OR EPIDEMIC DISEASES**. The surrounding scenery is very fine. From the main avenue the whole valley of East Tennessee can be seen, from the Cumberland Mountains on the west to the Great Smoky Mountains on the east; some of the tallest peaks east of the Rockies being in full view. **FINE MINERAL SPRINGS** are adjacent and are popular summer resorts. The society of Athens is excellent. A cordial welcome is extended to all law-abiding people locating in the town. The **EDUCATIONAL FACILITIES** are good. Beside public and preparatory schools, Athens is the seat of **THE GRANT MEMORIAL UNIVERSITY**, which has an enrollment of over 300, and whose graduates include some of the most distinguished citizens in the country. Among the industries and institutions of the place in active operation are:

THE ATHENS BUILDING & LOAN ASSOCIATION, \$250,000. THE ATHENS WOOLEN MILLS, \$100,000.

THE FIRST NATIONAL BANK, \$50,000.—To be increased at once.

FOUNDRY & MACHINE SHOPS, \$25,000.

FURNITURE WORKS, \$15,000.

FLOURING MILLS, \$20,000, etc.

500 men are now at work on the new railroad from Athens to the

RICHEST IRON FIELDS IN THE SOUTH.

JUST EAST OF THE TOWN.

Only eight miles from Athens are **VEINS OF RED FOSSILIFEROUS ORE 11½ FEET THICK**, and 4 to 12 miles beyond are **THE LARGEST DEPOSITS OF BROWN ORES IN THE SOUTH**. The ores of both varieties, in addition to being inexhaustible, are both superior in quality to any ores of either variety at present mined in the South. An assertion that can be sustained. Coke can now be obtained at the lowest prices, and in addition a new railroad is now projected to the Cumberland Coal Fields, only 22 miles distant. These roads will give Athens **UNSURPASSED SHIPPING FACILITIES**. The road under construction will penetrate large deposits of Tennessee Variegated Marble; also an Unopened Timbered Region, and will develop the

Largest Colored Slate Deposits in the United States.

These quarries are now being opened, and are pronounced by experts Absolutely Inexhaustible, and equal in quality to the finest Vermont Colored Slate.

The ATHENS MINING & MANUFACTURING CO.

Have alone just contracted for the erection of over

\$500,000 IN NEW MANUFACTURING ENTERPRISES

At Athens, including a 100 ton Blast Furnace, cost \$200,000; Cotton Mills, cost \$150,000; Furniture Works, employing 200 men, cost \$100,000; Hotel, cost \$60,000; Water Works, Street Car Lines, &c. These improvements have been commenced which, added to other improvements projected, will add

\$1,000,000 OF NEW MANUFACTURING ENTERPRISES TO ATHENS.

The company desire to open correspondence with parties desiring to locate, and will extend liberal inducements in addition to gifts of sites in order to induce New Manufacturing Enterprises to locate in Athens. City property is doubling in value every few months, and at present low prices is beyond question a very fine investment.

The Athens Mining & Manufacturing Company,

R. L. BRIGHT, President.

R. J. FISHER, Secy. and Genl. Manager.

TRADE NOTES.

THE recently organized Electric Light & Power Co., of De Land, Fla., are soon to erect a Wainwright corrugated copper tube feed-water heater in their plant.

THE artesian well and vertical mining pumps, manufactured by the A. S. Cameron Steam Pump Works, of New York, are taking well throughout the South. They have recently filled orders from Texas, Virginia, North Carolina, Georgia and many other places, while numerous inquiries indicate the interest and show the extending reputation of this style of pumps.

MR. C. R. MAKEPEACE, of the firm of C. R. Makepeace & Co., cotton and woolen mill engineers, Providence, R. I., whose advertisement may be found in our columns, leaves this week for an extended trip through the Southern States and Mexico. Parties interested in the establishing of cotton and woolen mills, or the development of water powers for manufacturing purposes, would do well to personally consult with him while South, as his experience as a mill engineer, both North and South, enables him to be of service to parties contemplating the construction and equipping of new mills or the reorganization of old ones. If parties desire to consult with Mr. Makepeace and will address his Providence office the letters will be duly forwarded to him.

THE name of the Tanner & Delaney Engine Co., of Richmond, Va., has by order of the court been changed to the Richmond Locomotive & Machine Works. As this company have added to their extensive plant a large number of special tools, they are prepared to build of the latest and most approved designs of light locomotives—passenger, freight, tramway, noiseless, street motors and mine engines; also pole road locomotives, the only successful device of the kind made. Engines—stationary and portable, 12 to 300 horse power. Boilers—standard and special, 12 to 300 horse power. Saw mills, gas, water, creosoting and other heavy machinery.

CYLINDER BORING.—In our last issue we gave some particulars regarding a powerful cotton compress, which is being built at York, Pa. Messrs. Pedrick & Ayer, of Philadelphia, Pa., who recently completed the boring of these cylinders, 80 inches diameter, 9½ feet long, for the Pennsylvania Agricultural Works, are said to be the only firm in this country who can undertake a job of boring of this magnitude, as they are the only concern having the portable machinery and facilities for work of this description. They can re-bore cylinders from 3 inches to 110 inches diameter and any length at short notice. From an exchange we take the following notice of this house: "Messrs. Pedrick & Ayer (L. B. Flanders Tool Works) are frequently called upon to bore out immense cylinders or face the valve seats of ocean steamers at Philadelphia and other ports, with their portable tools designed for such work. There is, we believe, no other concern in this country which can face the valve seats or bore out the cylinders of ocean steamers during five or six days in which they are discharging and receiving their cargoes. And the European steamers traveling to Philadelphia get all such work done by the firm in question simply because there is no machinery on the other side of the water with which it can be done, at least without causing the loss of one or more trips. The Pedrick & Ayer machines are taken to the vessel and the valve seat or cylinder remains in place while being bored out or faced. A few weeks ago a cylinder for a cotton compress, 80 inches in diameter, was bored out by one of the Pedrick & Ayer machines, and the firm has successfully performed many similar jobs. During five days in October the

firm faced the 48 inches by 24 inches valve seat of the steamship Switzerland, of the Red Star Line, while in port at Philadelphia. This line is subsidized by the government of Belgium, and no repairs which can be done in Belgium shops are permitted to be done elsewhere. Only here and by the tools of this firm could this work be done in time to enable the vessel to sail on her regular day. The firm is now building two portable 36-inch rotary valve seat facing machines for the Standard Oil Company. It frequently sends out machines to various points in the South and as far west as the Mississippi river for jobs of cylinder boring, and not infrequently these jobs are to bore out cylinders which have been botched by other concerns. A good deal of the business of the concern in this particular line arises from this cause. The use of their machines for boring locomotive cylinders without removing them is very general and is rapidly increasing. The firm makes 28 styles of cylinder boring machines ranging from 3 inches to 110 inches.

THE Phoenix Iron Works, of Cleveland, Ohio, have issued a neat catalogue of their hand and steam power cranes, adapted for all uses. They say that "during the past twenty-five years our experience in designing and manufacturing cranes has been varied and quite extensive, which has enabled us to simplify and systematize their construction, thereby so reducing their cost that we can now offer substantial iron cranes at even less than wooden cranes have been heretofore obtainable. Our manufacture embraces every description of pivot crane, over-head traveling crane, locomotive crane, derricks, &c., adapted to operate either by "hand-power," "steam," "hydraulic," or "compressed air," for all purposes, within the range of ordinary business requirements. We furnish them all of iron, with frames built either from riveted plates, rolled I beams or channels, as best adapted for the purpose, all complete, with chains, hanging blocks, &c., all ready for use, and, when desired, will set them up in position. We furnish all castings, bolts, gearing, shafting, hanging blocks, jib trolleys, &c., all finished up complete, ready for setting in position on the wooden or iron frames to suit the convenience of those who desire to build their crane frames in their own shops."

THE list of sales of Babcock & Wilcox boilers for month of October, 1887, was as follows:

H. P. Westinghouse Illum. Co., Schenectady, N. Y.	592
Geo. P. Plant Mill Co., St. Louis, Mo., 2d order.	500
Enrico Canziani & Co., Genoa, Italy.	500
Cardenas Sugar Refin., Cardenas, Cuba, 6th order.	90
W. & A. Tremlett, Exeter, Eng., 2d order.	156
Brown Cotton Gin Co., New London, Conn.	104
Danville Store & Manfg. Co., Danville, Va.	104
F. Milone, Naples, Italy.	73
Steinlein Bros., Berlin, Germany.	51
Minn. & N.W. R.R. Co., St. Paul, Minn., 2d order.	184
Consolidated Stock & Petroleum Exchange, New York City.	146
Lancaster Water Works, Lancaster, Pa.	416
Garcia Icarbalceta Hermanos, City of Mexico.	98
Amelia & Renaud, Paris, France, (for export to Argentine Republic)	20
Societa Anglo-Romana per l'Illuminazione di Roma, 3d order.	30
John Dickinson & Co., Hemel Hemstead, Eng.	240
John McDonald, Townsville, Queensland.	51
A. B. Baby, Moscow, Russia, 17th order.	40
Societa per l'Illuminazione Elettrica, Palermo, Italy.	164
Louis Samuel, N. S. W., 2d order.	45
Compagnie Francaise d'Eclairage Electrique, Paris, France.	380
Societa Generale Italiana di Elettricita Sistema Edison, Livourne, Italy.	438

WE invite attention to the advertisement of Messrs. Dufur & Co., No. 36 N. Howard Street, manufacturers of wire railing and ornamental wire work. This is one of the oldest and the largest establishment of its class in this city. They occupy a large four-story building on Howard street as warerooms and factory, and their showroom contains everything in the line of wire goods, such as wire grating for windows, doors and office railing, wire screens for banks, churches and store fronts, wire cloth, galvanized wire, sieves, traps, sand and coal screens, etc. This firm has been in business since 1835, and their trade extends over the entire South.

THE great opera house at Vienna had to be closed recently because of a break-down in the electric light apparatus, caused by the cracking of the plates in the boilers, which were of Austrian manufacture. A complete new plant of boilers, amounting to 750 horse-power, has been ordered of the Glasgow house of the Babcock & Wilcox Co., and it is expected they will be ready for service in two weeks from the date of the order, which, if accomplished, will be remarkably quick work.

If you contemplate a visit to New York you should send for a copy of a comprehensive, well written and accurate guide to the city—128 pages and map—entitled "How to Know New York." Sent on receipt of 6 cents in stamps. Address Advertising Department, Grand Union Hotel, New York.

THE St. James Hotel, corner of Charles and Center streets, Baltimore, is excellently situated and convenient to street cars and depots. It is strictly first-class in all its appointments and cuisine. Secure good accommodations by writing or telegraphing John S. Crowther, manager.

Philadelphia Trade Notes.

THE Bridesburg Manufacturing Co. have orders ahead for four months. The force now employed at the works numbers about 500 hands, and the prospect is that it will be considerably increased in a short time. The company is at present engaged in the construction of carding, drawing, spinning, spooling and weaving machines for the West Point Manufacturing Co., of West Point, Ga.

THE Energy Manufacturing Co., Nos. 1115 to 1123 south 15th street, celebrated the completion of their first year's existence last week, and they have reason to be encouraged with the results that have already been accomplished. They started in with the intention of experimenting during the first year, their specialties being a friction driven center grinder, a drill guide and steady rest, and patent portable rope hoisting machines of different sizes. These devices display in their construction a great deal of mechanical ingenuity. Their practical value is apparent at sight. When, after a thorough test by the company, it was decided to sound the trade as to their merits, it was found that in a short time the demand would tax their resources to supply. Orders have accumulated rapidly, and it is now the intention to secure larger and more commodious quarters. Mr. T. W. R. McCabe, the mechanical engineer of the company, is hopeful that a new building will be occupied in a few months, when the present facilities will be more than doubtful.

AMONG the recent sales of gutta percha roofing by the Empire Paint & Roofing Co., Nos. 1128 and 1130 Race street, are the following: Queen Run Fire Brick Co., Lock Haven, Pa., 6,000 feet; Robert Muhlig Tannery, Salem, Mass., 2,000 feet; Sharon Boiler Works, Sharon, Pa., 3,000 feet; Commercial Guano Co., of Savannah, Ga., 26,000 feet; S. N. & C. Russell Manufacturing Co., Pittsfield, Mass., 4,000 feet; Aetna Glass & Manufacturing Co., Bellaire, O., 3,000 feet.

THOMAS WOOD & Co., Twenty-second and Wood streets, are shipping to the Red Bank Manufacturing Co., of Lexington, S. C., and to the Fort Mill Manufacturing Co., of Fort Mill, S. C., the entire equipment of those two establishments, shafting, etc., and everything for the transmission of power; looms, winding, rimming, dyeing, sizing machinery, etc., belting and bindings. The firm have just closed a contract to fit out the Cannon Manufacturing Co., of Concord, N. C., a new spinning mill, with shafting, pulleys, hangers, etc.

Speed on Southern Railroads.

THE Queen & Crescent Route, running trains from Cincinnati to New Orleans and Shreveport, La., and passing through Chattanooga, Birmingham, Tuscaloosa, Meridian, Jackson and Vicksburg, has, with its "Queen & Crescent Limited Express," reduced the time between Cincinnati and New Orleans (327 miles) to twenty-five and a half hours. This train leaves Cincinnati at 7:55 A. M., and arrives at New Orleans at 9:30 next morning.

Important.

When visiting New York city, save baggage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

THE air of perfection, cleanliness and home-like comfort, which is so apparent at the American House, Boston, is one of the characteristic features of that well regulated establishment.

THE Palace Hotel, Cincinnati, Ohio, is said to enjoy the reputation of being the best \$2 hotel in America. 250 rooms; 140 front rooms. All conveniences and excellent cuisine.

THE St. Charles Hotel, of Lowell, Mass., is situated convenient to the depots and near the principal manufacturing interests of the city. It is fitted up with all the modern improvements and has all the comforts of home.

PATENTS OBTAINED.

WM. H. BABCOCK, 513 Seventh St. WASHINGTON, D. C. (P. O. Box 200).

Attorney at Law and Solicitor of Patents. Formerly examiner in U. S. Patent Office. Eleven years practice before all branches of it. Payment for cases filed between November 1st and March 1st may be postponed until allowance if applicants are known to be reliable. All other Patent business (except selling Patents) carefully attended to.

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METAL-PLATE WORK; its Patterns and their Geometry. Also notes on metals and rules in measurement. For the use of tin, iron and zinc-plate workers, coppermiths, boiler makers and others. By C. T. Mills. 321 pages, with six plates and numerous diagrams. 8vo, cloth \$3.

Practical Electric Lighting. By A. B. Holmes. Explaining the principles in plain language, and giving instructions as to the proper care of the apparatus. 124 pages with 24 illustrations. 8vo, cloth \$1. Catalogue and circulars free.

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WANTED. Wood Worker, to take charge of factory grown to large for owner to manage. Business firmly established and in prosperous condition. Goods sold all over the South. Large experience. Brain and energy essential. Some money desirable. Good chance for right man to enter established business. G. C. TERRY, Nashville, Tenn.

Baltimore and Ohio Railroad Co.

ANNUAL MEETING OF THE STOCKHOLDERS.

The Annual Meeting of the stockholders of the Baltimore and Ohio Railroad Company was held on Monday, 21st inst., at their office in the Central Building.

Mr. Reverly Johnson was called to the chair, and Mr. William H. Ijams was appointed secretary. The Sixty-first Annual Report was submitted and read, as follows:

SIXTY-FIRST ANNUAL REPORT.

OFFICE OF THE BALTIMORE AND OHIO RAILROAD COMPANY, }
BALTIMORE, October 1st, 1887. }

The President and Directors submit to the stockholders of the Baltimore and Ohio Railroad Company the following statement of its affairs for the fiscal year ended 30th September, 1887.

The Reports of the Treasury Department, and of the managers of the systems east and west of the Ohio river, are appended.

THE REVENUES.

The Revenues of the Main Stem, including the Winchester and Potomac, Winchester and Strasburg, the Strasburg and Harrisonburg, the Metropolitan Branch, the Washington City and Point Lookout, the Fairmont, Morgantown and Pittsburgh, and South Branch Railroads, have been.....

Of the Washington Branch.....	\$11,201,348 34
" " Parkersburg Branch.....	380,399 97
" " Central Ohio Division.....	676,830 29
" " Lake Erie Division.....	1,283,536 28
" " Chicago Division.....	1,080,463 04
" " Wheeling and Pittsburgh Division.....	2,070,033 13
" " Newark, Somerset and Straitsville Railroad.....	465,009 77
" " Pittsburgh and Connellsville Railroad (Pittsburgh Division).....	183,010 48
" " Philadelphia Division.....	2,590,073 84

Total.....\$30,650,035 90
Showing an increase compared with 1886 of.....2,266,598 71

I.—OF THE MAIN STEM.

The Assets and Liabilities of the Company are shown in statement A of the Treasurer. The Earnings and Working Expenses are shown in statement B.

The following analytic statement is given, in order to furnish particulars of expenses in comparison with the two preceding years.

MAIN STEM.

Statement of the Earnings and Working Expenses for the Fiscal Years 1885, 1886 and 1887, including the Winchester and Potomac, Winchester and Strasburg, the Strasburg and Harrisonburg, the Metropolitan Branch, the Washington City and Point Lookout, the Fairmont, Morgantown and Pittsburgh, and South Branch Railroads.

	1885.	1886.	1887.
EARNINGS.....	\$9,733,251 70	\$9,846,613 04	\$11,201,348 34
EXPENSES.....			
General Expenses.....	\$203,391 86	\$205,231 71	\$245 118 67
Losses by Accidents, &c.....	31,356 05	71,862 66	61,687 80
Expenses of Transportation.....	2,720,000 96	2,500,036 26	3,145,088 84
Repairs of Railway.....	691,162 54	680,031 95	734,854 02
Repairs of Water Stations.....	14,955 37	18,887 77	23,696 94
Repairs and Construction of Depots.....	161,231 04	210,217 53	211,313 83
Repairs of Bridges.....	71,550 99	86,368 03	90,479 63
Repairs of Telegraph Lines.....	105,882 41	35,328 27	29,478 83
Repairs of Stationary Machinery.....	79,512 92	70,928 17	79,404 29
Watching Cuts.....	32,433 47	39,023 61	38,436 28
Watching Tunnels.....	4,590 43	4,362 53	5,695 16
Watching Bridges.....	16,702 35	12,810 24	12,788 29
Pumping Water.....	30,013 73	27,261 36	29,263 51
Repairs of Locomotives.....	475,205 09	479,857 75	619,545 53
Repairs of Passenger Cars.....	262,849 55	282,740 80	328,567 92
Repairs of Freight Cars.....	416,221 59	609,680 04	592,960 84
Cleaning Engines and Cars.....	12,061 67	102,701 25	156,235 38
Contingent Expenses of the Machinery Dept.....	8,475 00	12,233 31	14,406 41
Fuel.....	323,431 11	341,025 00	411,670 80
Preparing Fuel and Filling Tenders.....	22,560 42	20,150 85	26,409 31
	\$5,763,351 55	\$5,830,247 08	\$6,858,004 78
Earnings more than Expenses.....	\$3,969,900 15	\$4,026,365 96	\$4,343,343 56
Working Expenses.....	59.21 per ct.	59.10 per ct.	61.22 per ct.

It is shown that the earnings of the Main Stem and the branches stated, in comparison with the fiscal year 1886, have increased \$1,354,735.30, and the working expenses have increased \$1,087,767.70, making a comparative increase of the net profits of \$316,977.60.

The expenses of working and keeping the roads and machinery in repair amounted to \$6,858,004.78, being 61.22 per cent. upon the earnings, showing an increase of 2.12 per cent. compared with the previous year.

A semi-annual cash dividend of four per cent. upon the capital stock was paid on the 1st of November, 1886, and of four per cent. on the 17th of May, 1887.

The Profit and Loss Account shows an increase for the past fiscal year of \$36,258.85. It will be seen by this account that the Surplus Fund, which represents invested capital derived from net earnings, and which is not represented by either stock or bonds, now amounts to \$48,063,730.01.

The payments for investments on account of the Sinking Funds for the redemption of the Sterling Loans due in 1895, 1903, 1910 and 1927, during the year amounted to \$174,458.98, which at \$4.84 per pound sterling make \$38,045.44. The annual appropriations for these Sinking Funds, including the Consolidated Mortgage Bonds of the Pittsburgh and Connellsville Railroad Company due in 1926, are \$387,707.02. The increments of all these Sinking Funds on the 30th September, 1887, are \$397,754.80, making a total of appropriations, and of increments for the fiscal year, of \$735,461.82. There is due all the Sinking Funds the sum of \$543,505.07, as shown in the Asset and Liability table A.

In accordance with the agreement with the City of Baltimore, the twelfth annual payment, namely, \$40,000, of the principal of the bond for one million dollars given for the purchase of the interest of the City in the Pittsburgh & Connellsville Railroad Company, has been made, thus reducing this obligation to \$590,000.

The following shows the aggregate of payments made on account of the principal, and the investments for Sinking Funds on account of the debts stated, namely:

Mortgage Loan, redeemable in 1890.....	\$123,000 00
Mortgage Loan, redeemable in 1895.....	785,000 00
Bonds of the Northwestern Virginia Railroad Company for \$500,000, endorsed by the Baltimore and Ohio Railroad Company, payable in 1885.....	300,000 00
Loan of the City of Baltimore.....	2,425,000 00
Sterling Loan, redeemable in 1895.....	2,209,412 00
Sterling Loan, redeemable in 1903.....	2,807,988 00
Sterling Loan, redeemable in 1910.....	1,807,904 00
Sterling Loan for the Baltimore and Ohio and Chicago Companies, redeemable in 1927.....	416,240 00
Purchase of the interest of the City of Baltimore in the Pittsburgh and Connellsville Railroad Company.....	480,000 00
Sinking Fund of the Pittsburgh and Connellsville Railroad Company.....	282,044 00
Sinking Fund of the Baltimore, Washington and Alexandria Branch of the Washington City and Point Lookout Railroad Company.....	61,564 24
Total.....	\$11,560,152 24

The coal trade of the Main Stem shows an aggregate of 4,309,477 tons, which includes 553,114 tons for the company's supply. Of this quantity that transported for the public, delivered in Baltimore, is 2,568,058 tons, and that delivered at local and Western points, 1,068,306 tons. In the fiscal year 2,137,227 tons of coke and coal were transported on the Pittsburgh Division, 1,68,869 tons of coal on the Trans-Ohio Divisions, and 363,045 tons of coal on the Philadelphia Division.

The aggregate of coal and coke thus transported, including all Divisions, was 7,878,606 tons, showing an increase for the year of 448,241 tons.

The tonnage of through merchandise East and West has been 3,537,307 tons, whilst in the preceding year it was 2,731,119 tons, showing an increase of 806,008 tons. 1,274,542 barrels of flour and 12,977,085 bushels of grain were brought to Baltimore during the fiscal year, being an increase of 822,392 barrels of flour and a decrease of 741,393 bushels of grain as compared with the preceding year. Of this aggregate of grain, 6,600,027 bushels were wheat, 5,223,770 bushels were corn and 848,431 bushels were oats, being an increase of 3,162,868 bushels of wheat, a decrease of 4,350,505 bushels of corn and an increase of 164,263 bushels of oats. In live stock, the traffic has been 43,230 tons, a decrease of 27,000 tons, and in lumber brought to Baltimore 76,103 tons, a decrease of 16,728 tons. The tonnage of through merchandise East and West was:

For 1880.....	1,980,397 tons.	For 1884.....	2,275,252 tons.
" 1881.....	2,014,110 "	" 1885.....	2,838,147 "
" 1882.....	2,043,227 "	" 1886.....	2,731,119 "
" 1883.....	2,108,325 "	" 1887.....	3,537,307 "

All the tracks of the Main Stem and of nearly all the Branches east of the Ohio river are now laid with steel rails. The increased cost of steel substituted for iron rails has been uniformly charged to the Repair Account.

The condition of the road bed, tracks and engines has been maintained at a high standard. A large number of new sleeping coaches, parlor and thoroughfare cars have been added, replete with every modern improvement and convenience.

Attention is invited to the Reports of the Managers east and west of the Ohio river, in which will be found much interesting information in regard to the working of the roads, the increase of plant and accommodations, and improvements made during the year.

77 engines and 3,963 cars have been acquired and built at Company's shops during the year. The cost of these engines and cars has been \$2,734,034.74. Of the foregoing there have been placed on the line, under the terms of the Car Trust, 73 locomotive engines and the following cars: 2,356 house, 250 hopper gondola, 3 refrigerator express, 5 baggage, 15 passenger, 10 sleeping and 10 parlor. 234 engines and 2,434 cars have been thoroughly repaired, the cost of which, \$802,900.96, has been charged to the Repair Account. 1,801 cars have been repainted, and 640 cars have had their capacity increased to 30 tons.

II.—OF THE WASHINGTON BRANCH.

The financial condition of the Washington Branch is shown by the statements of the Treasurer, D. E. and F. It will be seen by statement E that the earnings were \$380,399.97, showing an increase of \$55,079.37 compared with the previous year. The expenditures charged, according to the system explained in previous annual reports, amount to \$88,830.11, being for improvements and for repairs of railway, depots, water stations and bridges, and for pumping water. The partial expenditures charged being deducted from the revenue stated, the sum of \$291,569.86 remains, an increase of net earnings, compared with the preceding year, of \$57,055.25. The expenditures upon the Washington Branch show a decrease, compared with the preceding year, of \$1,975.88. In order to make this Branch as perfect as possible, important improvements continue to be made, particularly in the substitution of stone for gravel ballast. It is designed to make the road free from dust, and to perfect it in every practicable form. Semi-annual dividends of five per cent. upon the capital stock were paid on the 1st of November, 1886, and on the 30th of April, 1887.

III.—OF THE PARKERSBURG BRANCH RAILROAD COMPANY.

Statement G of the Treasurer shows that the earnings of this road for the fiscal year were \$676,830.29, and the working expenses \$587,872.93, showing net \$88,957.36. The earnings were \$13,786.54 more than in the previous year, and the expenses increased \$88,176.43, showing net decrease, compared with the previous year, of \$72,389.89.

The aggregate earnings, working expenses and net results of the Main Stem, including the Winchester and Potomac, Winchester and Strasburg, the Strasburg and Harrisonburg, the Metropolitan Branch, the Washington City and Point Lookout, the Fairmont, Morgantown and Pittsburgh, and South Branch Railroads; of the Washington Branch and the Parkersburg Branch Railroads; of the Central Ohio, Lake Erie, Pittsburgh, Chicago, Philadelphia and Wheeling and Pittsburgh Divisions; and of the Newark, Somerset and Straitsville Railroad for the fiscal year were, viz:

	Earnings.	Expenses.	Deficit.	Net Earnings.
Main Stem, including the Winchester and Potomac, Winchester and Strasburg, the Strasburg and Harrisonburg, the Metropolitan Branch, the Washington City and Point Lookout, the Fairmont, Morgantown and Pittsburgh, and South Branch Railroads.....	\$11,201,348 34	\$6,858,004 78		\$4,343,343 56
Washington Branch.....	380,399 97	88,830 11		291,569 86
Parkersburg Branch.....	676,830 29	587,872 93		88,957 36
Central Ohio Division.....	1,283,536 28	753 157 85		530,368 43
Lake Erie Division.....	1,080,463 04	788,599 23		291,863 81
Chicago Division.....	2,070,033 13	1,988,911 09		81,122 04
Pittsburgh Division.....	2,590,073 84	1,594,810 23		995,263 61
Wheeling and Pittsburgh Division.....	465,009 77	454,539 90		46,469 87
Newark, Somerset and Straitsville R.R.....	183,010 48	180,434 51	\$18,000 13	2,575 97
Philadelphia Division.....	718,740 76	794,161 57	75,420 81	
Working Expenses, 68.34 % et.....	\$20,650,035 90	\$14,120,131 20	\$65,150 94	\$6,634,055 64
				65,150 94
				\$6,568,904 70

The Main Stem has been debited with interest on the loans issued on account of the following Companies: The Baltimore and Ohio and Chicago Railroad Companies, loan of 1877; The Parkersburg Branch Railroad Company, loan of 1879; The Baltimore and Philadelphia Railroad Company, loan of 1883, and the Pittsburgh and Connellsville Railroad Company, loan of 1885. The Main Stem interest has been credited with the entire net earnings of these lines, except in the case of the Pittsburgh and Connellsville Railroad Company, where the net earnings are first applied to the payment of its own fixed charges, the remainder being credited in Main Stem interest.

The passenger earnings on the entire system in 1886 were \$4,276,363.86, and in 1887, \$4,878,575.63—an increase of \$602,211.77.

The tonnage earnings on the entire system in 1886 were \$14,146,073.33, and in 1887, \$15,780,460.27, an increase of \$1,634,386.94.

The aggregate working expenses of the Main Stem, with all Branches and Divisions, were 68.34 per cent. of the whole gross revenues, being 3.01 per cent. more than the preceding year.

The condition of all our lines, their roadbeds, tracks, and structures, has not only been fully maintained, but continuously and permanently improved.

THE PITTSBURGH AND CONNELLSVILLE RAILROAD.

The earnings for the year ended September 30, 1887, were.....\$2,590,073 84
The working expenses for the same period were.....1,594,810 23
being 61.36 per cent.

Showing net earnings.....\$1,004,263 61

The earnings were \$168,988.65 more than those of the previous year, and the expenses increased \$7,146.02, showing net increase compared with the preceding year of \$161,842.63. The decrease in the ratio of working expenses has been 3.97 per cent. as compared with the preceding year.

BALTIMORE AND OHIO AND CHICAGO RAILROAD COMPANIES.

The earnings of these companies, known as the Chicago Division of the Baltimore and Ohio Railroad Company, for the fiscal year were.....\$2,070,033 13

The working expenses for the same period were.....1,988,911 09
66.08 per cent., being 8.96 per cent. more than the preceding year.

The surplus for credit to the account of this Division is.....\$ 81,122 04

The earnings were \$28,534.52 less than in the previous year, whilst the expenses increased \$100,259.77, showing a comparative decrease of \$188,794.25.

GENERAL REMARKS.

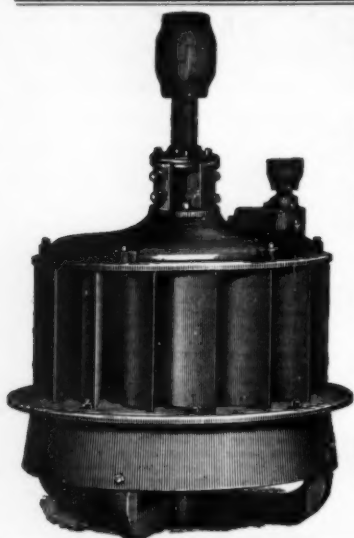
On the 17th of August, 1887, a contract was made with the United States Express Company for the sale to it of the Express franchises and privileges of the Baltimore and Ohio system, and for the operation of an express line over all the railways controlled by the Baltimore and Ohio Company. The amount received for the sale of these franchises appears in the Profit and Loss statement C.

W. F. BURNS,
President pro tem.

GEO. H. CORNELSON,
Orangeburg, S. C.

RICHMOND MACHINE WORKS.
RICHMOND, IND.

1 Engine Lathe, Good order. 1 Cast Iron Lathe.
 1 Engine Lathe, 36 in. x 24 ft. Triple Gear'd.
 " " 78 in. x 13 ft.
 " " 36 in. x 7 ft. 1 Engine Lathe 18 in. x 3 ft.
 " " each 24 in. x 30 in. and 24 ft.
 " " 24 in. x 13 ft. bed. Field.
 " " 3 ft. x 25 ft.
 " " 24 in. x 35 x 16 ft.
 " " 28 in. x 30 ft.
 " " 30 in. x 10 and 13 ft.
 1 each " 16 in. x 6 ft. and 10 ft.
 6 " " 14 in. x 6 ft.
 " " 12 in. x 5 ft.
 4 " " 12 in. x 6 ft.
 " " 11 in. x 4 ft. and 5 ft.
 " " 10 in. x 3 ft. 1 Foot power.
 2 Axle Lathe. Best Cast Iron.
 " " 16 in. x 16 in. x 3 ft. Pratt & Whitney.
 1 " " 24 in. x 24 in. x 5 and 8 ft.
 1 " " 30 in. x 30 in. x 7 ft.
 1 Planer, 36 in. x 36 in. x 9 ft.
 " " 34 in. x 28 in. x 12 ft.
 2 Shaper, 6 ft. stroke. 1 12-in. Shaper, two tables.
 " " 12 ft. stroke. 1 Round.
 " " each 12, 15 and 30 in. stroke.
 " " 17 in. stroke Shaper, heavy. 1 Feed.
 2 Crank Planer, 6 Lincoln Pat. No. 3 Millers.
 each 3 and 6 Spindle Gauge Drill.
 each Nos. 2 and 3 Screw Machines. Wire Feed.
 Pratt & Whitney. Good as new.
 1 375-lb Drop Hammer. Beecher & Peck.
 1 50-lb. Vertical Hammer.
 1 No. 30 Ferracute Press. 1 Nut-Facing Machine.
 20 Foot Presses, assorted. 3 Power Presses, assorted.
 20 Punching and Shearing Machines, assorted.
 2 Return Tubular Boilers, 35 H.-P.
 1 National Bolt Cutter, sizes, 3/4 in. to 1 in.
 1 Bolt Cutter, Sizes, 3/4 in. to 3 in. included. Wm. Sellers & Co.
 each Nos. 2 & 3 Garvin Hand Millers. Good as new.
 1 Horizontal Engine, each 25 and 45 H.-P.
 2 Slottor 13 in. stroke.
 1 6-in. Boring and Turning Mill. 1 Pond.
 1 No. 3 Screw Machine. Plaine. Browne & Sharpe.
 2 Spindle Profiling Machine.
 1 Horizontal Boring Machine, 36 in. x 6 ft.
 1 6 H.-P. Baxter Engine. 1 Valve Miller.
 1 No. 3 Siles & Parker Pump "A 1"
 1 No. 3 1/2 Siles & Parker Pump.
 Also full line of New Machinery.
 New York Agency TAYLOR MFG. CO., Engines,
 Boilers, &c Correspondence solicited.
 PRENTISS TOOL AND SUPPLY CO.
 P. O. Box 226. No. 40 Der St. New York City.



The VICTOR TURBINE

Possesses more than Double the Capacity of other Water Wheels of same diameter, and has produced the Best Results on Record, as shown in the Following Tests at Holyoke Testing Flume:

Size of Wheel.	Head in Ft.	Horse Power.	Per Ct. Useful Effect.
15-inch.	18.06	30.17	.9833
17½-in.	17.98	36.35	.9900
20-inch.	18.31	49.00	.9533
25-inch.	17.90	66.63	.9584
30-inch.	11.65	82.54	.9676

WITH PROPORTIONATELY HIGH EFFICIENCY AT PART-GATE.

Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably recommend it to the attention of ALL discriminating purchasers. These wheels are of very Superior Workmanship and Finish, and of the Best Material. We also continue to manufacture and sell at very low prices the

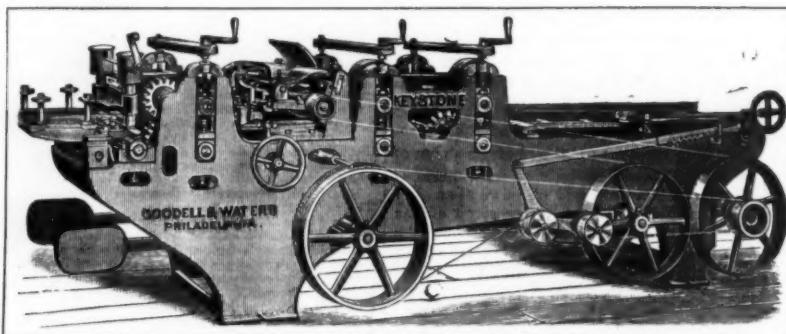
—ECLIPSE DOUBLE TURBINE,—

So long and favorably known. State your requirements, and send for Catalogue to the

STILWELL & BIERCE MFG. COMPANY
DAYTON, OHIO, U. S. A.

"KEYSTONE"

Rapid Feed Flooring Machine.



SEND FOR DESCRIPTIVE CIRCULAR AND PRICES.

GOODELL & WATERS, Manufacturers,

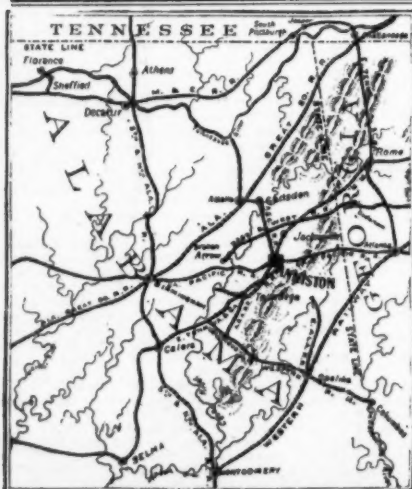
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LAND AND LOAN ASSOCIATION.
Incorporated.

Commission Dealers in

Lands, Stocks and Bonds.

—CITY AND MINERAL PROPERTY—
A SPECIALTY.

Capital Stock
\$100 000

CORRESPONDENCE
SOLICITED.



ANNISTON, ALA.

—REFERENCES:—
First National Bank, Anniston, Ala.
Col. John M. McIlwain, Pres. Anniston City Land Co.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD, }
BALTIMORE, Nov. 23, 1887.

Throughout the South there are indications of increased activity. The scarcity of money has had some effect in depressing business, but this is now passing away and confidence is increasing, and in all directions the outlook points to a season of unusual activity, especially in industrial matters. Factories of all kinds are crowded with work at profitable prices, and new enterprises are rapidly being added to the list. Everybody is cheerful and everything looks bright for the business interests of the South.

In manufactured iron there is no change reported, though prices are somewhat weaker. We quote as before, viz:

Ref. Bar Iron, 1 to 2 1/2 to 3	2.10	2.40c
" " 3 to 4 1/2 to 5	2.10	2.40c
" " 5 to 6 1/2 to 7	2.10	2.40c
" " 7 to 8 1/2 to 9	2.10	2.40c
" " 9 to 10 1/2 to 11	2.10	2.40c
" " 11 to 12 1/2 to 13	2.10	2.40c
" " 13 to 14 1/2 to 15	2.10	2.40c
" " 15 to 16 1/2 to 17	2.10	2.40c
" " 17 to 18 1/2 to 19	2.10	2.40c
" " 19 to 20 1/2 to 21	2.10	2.40c
" " 21 to 22 1/2 to 23	2.10	2.40c
" " 23 to 24 1/2 to 25	2.10	2.40c
" " 25 to 26 1/2 to 27	2.10	2.40c
" " 27 to 28 1/2 to 29	2.10	2.40c
" " 29 to 30 1/2 to 31	2.10	2.40c
" " 31 to 32 1/2 to 33	2.10	2.40c
" " 33 to 34 1/2 to 35	2.10	2.40c
" " 35 to 36 1/2 to 37	2.10	2.40c
" " 37 to 38 1/2 to 39	2.10	2.40c
" " 39 to 40 1/2 to 41	2.10	2.40c
" " 41 to 42 1/2 to 43	2.10	2.40c
" " 43 to 44 1/2 to 45	2.10	2.40c
" " 45 to 46 1/2 to 47	2.10	2.40c
" " 47 to 48 1/2 to 49	2.10	2.40c
" " 49 to 50 1/2 to 51	2.10	2.40c
" " 51 to 52 1/2 to 53	2.10	2.40c
" " 53 to 54 1/2 to 55	2.10	2.40c
" " 55 to 56 1/2 to 57	2.10	2.40c
" " 57 to 58 1/2 to 59	2.10	2.40c
" " 59 to 60 1/2 to 61	2.10	2.40c
" " 61 to 62 1/2 to 63	2.10	2.40c
" " 63 to 64 1/2 to 65	2.10	2.40c
" " 65 to 66 1/2 to 67	2.10	2.40c
" " 67 to 68 1/2 to 69	2.10	2.40c
" " 69 to 70 1/2 to 71	2.10	2.40c
" " 71 to 72 1/2 to 73	2.10	2.40c
" " 73 to 74 1/2 to 75	2.10	2.40c
" " 75 to 76 1/2 to 77	2.10	2.40c
" " 77 to 78 1/2 to 79	2.10	2.40c
" " 79 to 80 1/2 to 81	2.10	2.40c
" " 81 to 82 1/2 to 83	2.10	2.40c
" " 83 to 84 1/2 to 85	2.10	2.40c
" " 85 to 86 1/2 to 87	2.10	2.40c
" " 87 to 88 1/2 to 89	2.10	2.40c
" " 89 to 90 1/2 to 91	2.10	2.40c
" " 91 to 92 1/2 to 93	2.10	2.40c
" " 93 to 94 1/2 to 95	2.10	2.40c
" " 95 to 96 1/2 to 97	2.10	2.40c
" " 97 to 98 1/2 to 99	2.10	2.40c
" " 99 to 100 1/2 to 101	2.10	2.40c
" " 101 to 102 1/2 to 103	2.10	2.40c
" " 103 to 104 1/2 to 105	2.10	2.40c
" " 105 to 106 1/2 to 107	2.10	2.40c
" " 107 to 108 1/2 to 109	2.10	2.40c
" " 109 to 110 1/2 to 111	2.10	2.40c
" " 111 to 112 1/2 to 113	2.10	2.40c
" " 113 to 114 1/2 to 115	2.10	2.40c
" " 115 to 116 1/2 to 117	2.10	2.40c
" " 117 to 118 1/2 to 119	2.10	2.40c
" " 119 to 120 1/2 to 121	2.10	2.40c
" " 121 to 122 1/2 to 123	2.10	2.40c
" " 123 to 124 1/2 to 125	2.10	2.40c
" " 125 to 126 1/2 to 127	2.10	2.40c
" " 127 to 128 1/2 to 129	2.10	2.40c
" " 129 to 130 1/2 to 131	2.10	2.40c
" " 131 to 132 1/2 to 133	2.10	2.40c
" " 133 to 134 1/2 to 135	2.10	2.40c
" " 135 to 136 1/2 to 137	2.10	2.40c
" " 137 to 138 1/2 to 139	2.10	2.40c
" " 139 to 140 1/2 to 141	2.10	2.40c
" " 141 to 142 1/2 to 143	2.10	2.40c
" " 143 to 144 1/2 to 145	2.10	2.40c
" " 145 to 146 1/2 to 147	2.10	2.40c
" " 147 to 148 1/2 to 149	2.10	2.40c
" " 149 to 150 1/2 to 151	2.10	2.40c
" " 151 to 152 1/2 to 153	2.10	2.40c
" " 153 to 154 1/2 to 155	2.10	2.40c
" " 155 to 156 1/2 to 157	2.10	2.40c
" " 157 to 158 1/2 to 159	2.10	2.40c
" " 159 to 160 1/2 to 161	2.10	2.40c
" " 161 to 162 1/2 to 163	2.10	2.40c
" " 163 to 164 1/2 to 165	2.10	2.40c
" " 165 to 166 1/2 to 167	2.10	2.40c
" " 167 to 168 1/2 to 169	2.10	2.40c
" " 169 to 170 1/2 to 171	2.10	2.40c
" " 171 to 172 1/2 to 173	2.10	2.40c
" " 173 to 174 1/2 to 175	2.10	2.40c
" " 175 to 176 1/2 to 177	2.10	2.40c
" " 177 to 178 1/2 to 179	2.10	2.40c
" " 179 to 180 1/2 to 181	2.10	2.40c
" " 181 to 182 1/2 to 183	2.10	2.40c
" " 183 to 184 1/2 to 185	2.10	2.40c
" " 185 to 186 1/2 to 187	2.10	2.40c
" " 187 to 188 1/2 to 189	2.10	2.40c
" " 189 to 190 1/2 to 191	2.10	2.40c
" " 191 to 192 1/2 to 193	2.10	2.40c
" " 193 to 194 1/2 to 195	2.10	2.40c
" " 195 to 196 1/2 to 197	2.10	2.40c
" " 197 to 198 1/2 to 199	2.10	2.40c
" " 199 to 200 1/2 to 201	2.10	2.40c
" " 201 to 202 1/2 to 203	2.10	2.40c
" " 203 to 204 1/2 to 205	2.10	2.40c
" " 205 to 206 1/2 to 207	2.10	2.40c
" " 207 to 208 1/2 to 209	2.10	2.40c
" " 209 to 210 1/2 to 211	2.10	2.40c
" " 211 to 212 1/2 to 213	2.10	2.40c
" " 213 to 214 1/2 to 215	2.10	2.40c
" " 215 to 216 1/2 to 217	2.10	2.40c
" " 217 to 218 1/2 to 219	2.10	2.40c
" " 219 to 220 1/2 to 221	2.10	2.40c
" " 221 to 222 1/2 to 223	2.10	2.40c
" " 223 to 224 1/2 to 225	2.10	2.40c
" " 225 to 226 1/2 to 227	2.10	2.40c
" " 227 to 228 1/2 to 229	2.10	2.40c
" " 229 to 230 1/2 to 231	2.10	2.40c
" " 231 to 232 1/2 to 233	2.10	2.40c
" " 233 to 234 1/2 to 235	2.10	2.40c
" " 235 to 236 1/2 to 237	2.10	2.40c
" " 237 to 238 1/2 to 239	2.10	2.40c
" " 239 to 240 1/2 to 241	2.10	2.40c
" " 241 to 242 1/2 to 243	2.10	2.40c
" " 243 to 244 1/2 to 245	2.10	2.40c
" " 245 to 246 1/2 to 247	2.10	2.40c
" " 247 to 248 1/2 to 249	2.10	2.40c
" " 249 to 250 1/2 to 251	2.10	2.40c
" " 251 to 252 1/2 to 253	2.10	2.40c
" " 253 to 254 1/2 to 255	2.10	2.40c
" " 255 to 256 1/2 to 257	2.10	2.40c
" " 257 to 258 1/2 to 259	2.10	2.40c
" " 259 to 260 1/2 to 261	2.10	2.40c
" " 261 to 262 1/2 to 263	2.10	2.40c
" " 263 to 264 1/2 to 265	2.10	2.40c
" " 265 to 266 1/2 to 267	2.10	2.40c
" " 267 to 268 1/2 to 269	2.10	2.40c
" " 269 to 270 1/2 to 271	2.10	2.40c
" " 271 to 272 1/2 to 273	2.10	2.40c
" " 273 to 274 1/2 to 275	2.10	2.40c
" " 275 to 276 1/2 to 277	2.10	2.40c
" " 277 to 278 1/2 to 279	2.10	2.40c
" " 279 to 280 1/2 to 281	2.10	2.40c
" " 281 to 282 1/2 to 283	2.10	2.40c
" " 283 to 284 1/2 to 285	2.10	2.40c
" " 285 to 286 1/2 to 287	2.10	2.40c
" " 287 to 288 1/2 to 289	2.10	2.40c
" " 289 to 290 1/2 to 291	2.10	2.40c
" " 291 to 292 1/2 to 293	2.10	2.40c
" " 293 to 294 1/2 to 295	2.10	2.40c
" " 295 to 296 1/2 to 297	2.10	2.40c
" " 297 to 298 1/2 to 299	2.10	2.40c
" " 299 to 300 1/2 to 301	2.10	2.40c
" " 301 to 302 1/2 to 303	2.10	2.40c
" " 303 to 304 1/2 to 305	2.10	2.40c
" " 305 to 306 1/2 to 307	2.10	2.40c
" " 307 to 308 1/2 to 309	2.10	2.40c
" " 309 to 310 1/2 to 311	2.10	2.40c
" " 311 to 312 1/2 to 313	2.10	2.40c
" " 313 to 314 1/2 to 315	2.10	2.40c
" " 315 to 316 1/2 to 317	2.10	2.40c
" " 317 to 318 1/2 to 319	2.10	2.40c
" " 319 to 320 1/2 to 321	2.10	2.40c
" " 321 to 322 1/2 to 323	2.10	2.40c
" " 323 to 324 1/2 to 325	2.10	2.40c
" " 325 to 326 1/2 to 327	2.10	2.40c
" " 327 to 328 1/2 to 329	2.10	2.40c
" " 329 to 330 1/2 to 331	2.10	2.40c
" " 331 to 332 1/2 to 333	2.10	2.40c
" " 333 to 334 1/2 to 335	2.10	2.40c
" " 335 to 336 1/2 to 337	2.10	2.40c
" " 337 to 338 1/2 to 339	2.10	2.40c
" " 339 to 340 1/2 to 341	2.10	2.40c
" " 341 to 342 1/2 to 343	2.10	2.40c
" " 343 to 344 1/2 to 345	2.10	2.40c
" " 345 to 346 1/2 to 347	2.10	2.40c
" " 347 to 348 1/2 to 349	2.10	2.40c
" " 349 to 350 1/2 to 351	2.10	2.40c
" " 351 to 352 1/2 to 353	2.10	2.40c
" " 353 to 354 1/2 to 355	2.10	2.40c
" " 355 to 356 1/2 to 357	2.10	2.40c
" " 357 to 358 1/2 to 359	2.10	2.40c
" " 359 to 360 1/2 to 361	2.10	2.40c
" " 361 to 362 1/2 to 363	2.10	2.40c
" " 363 to 364 1/2 to 365	2.10	2.40c
" " 365 to 366 1/2 to 367	2.10	2.40c
" " 367 to 368 1/2 to 369	2.10	2.40c
" " 369 to 370 1/2 to 371	2.10	2.40c
" " 371 to 372 1/2 to 373	2.10	2.40c
" " 373 to 374 1/2 to 375	2.10	2.40c
" " 375 to 376 1/2 to 377	2.10	2.40c
" " 377 to 378 1/2 to 379	2.10	2.40c
" " 379 to 380 1/2 to 381	2.10	2.40c
" " 381 to 382 1/2 to 383	2.10	2.40c
" " 383 to 384 1/2 to 385	2.10	2.40c
" " 385 to 386 1/2 to 387	2.10	2.40c
" " 387 to 388 1/2 to 389	2.10	2.40c
" " 389 to 390 1/2 to 391	2.10	2.40c
" " 391 to 392 1/2 to 393	2.10	2.40c
" " 393 to 394 1/2 to 395	2.10	2.40c
" " 395 to 396 1/2 to 397	2.10	2.40c
" " 397 to 398 1/2 to 399	2.10	2.40c
" " 399 to 400 1/2 to 401	2.10	2.40c
" " 401 to 402 1/2 to 403	2.10	2.40c
" " 403 to 404 1/2 to 405	2.10	2.40c
" " 405 to 406 1/2 to 407	2.10	2.40c
" " 407 to 408 1/2 to 409	2.10	2.40c
" " 409 to 410 1/2 to 411	2.10	2.40c
" " 411 to 412 1/2 to 413	2.10	2.40c
" " 413 to 414 1/2 to 415	2.10	2.40c
" " 415 to 416 1/2 to 417	2.10	2.40c
" " 417 to 418 1/2 to 419	2.10	2.40c
" " 419 to 420 1/2 to 421	2.10	2.40c
" " 421 to 422 1/2 to 423	2.10	2.40c
" " 423 to 424 1/2 to 425	2.10	2.40c
" " 425 to 426 1/2 to 427	2.10	2.40c
" " 427 to 428 1/2 to 429	2.10	2.40c
" " 429 to 430 1/2 to 431	2.10	2.40c
" " 431 to 432 1/2 to 433	2.10	2.40c
" " 433 to 434 1/2 to 435	2.10	2.40c
" " 435 to 436 1/2 to 437	2.10	2.40c
" " 437 to 438 1/2 to 439	2.10	2.40c
" " 439 to 440 1/2 to 441	2.10	2.40c
" " 441 to 442 1/2 to 443	2.10	2.40c
" " 443 to 444 1/2 to 445	2.10	2.40c
" " 445 to 446 1/2 to 447	2.10	2.40c
" " 447 to 448 1/2 to 449	2.10	2.40c
" " 449 to 450 1/2 to 451	2.10	2.40c
" " 451 to 452 1/2 to 453	2.10	2.40c
" " 453 to 454 1/2 to 455	2.10	2.40c
" " 455 to 456 1/2 to 457	2.10	2.40c
" " 457 to 458 1/2 to 459	2.10	2.40c
" " 459 to 460 1/2 to 461	2.10	2.40c
" " 461 to 462 1/2 to 463	2.10	2.40c
" " 463 to 464 1/2 to 465	2.10	2.40c
" " 465 to 466 1/2 to 467	2.10	2.40c
" " 467 to 468 1/2 to 469	2.10	2.40c
" " 469 to 470 1/2 to 471	2.10	2.40c
" " 471 to 472 1/2 to 473	2.10	2.40c
" " 473 to 474 1/2 to 475	2.10	2.40c
" " 475 to 476 1/2 to 477	2.10	2.40c
" " 477 to 478 1/2 to 479	2.10	2.40c
" " 479 to 480 1/2 to 481	2.10	2.40c
" " 481 to 482 1/2 to 483	2.10	2.40c
" " 483 to 484 1/2 to 485	2.10	2.40c
" " 485 to 486 1/2 to 487	2.10	2.40c
" " 487 to 488 1/2 to 489	2.10	2.40c
" " 489 to 490 1/2 to 491	2.10	2.40c
" " 491 to 492 1/2 to 493	2.10	2.40c
" " 493 to 494 1/2 to 495	2.10	2.40c
" " 495 to 496 1/2 to 497	2.10	2.40c
" " 497 to 498 1/2 to 499	2.10	2.40c
" " 499 to 500 1/2 to 501	2.10	2.40c
" " 501 to 502 1/2 to 503	2.10	2.40c
" " 503 to 504 1/2 to 505	2.10	2.40c
" " 505 to 506 1/2 to 507	2.10	2.40c
" " 507 to 508 1/2 to 509	2.10	2.40c
" " 509 to 510 1/2 to 511	2.10	2.40c
" " 511 to 512 1/2 to 513	2.10	2.40c
" " 513 to 514 1/2 to 515	2.10	2.40c
" " 515 to 516 1/2 to 517	2.10	2.40c
" " 517 to 518 1/2 to 519	2.10	2.40c
" " 519 to 520 1/2 to 521	2.10	2.40c
" " 521 to 522 1/2 to 523	2.10	2.40c
" " 523 to 524 1/2 to 525	2.10	2.40c
" " 525 to 526 1/2 to 527	2.10	2.40c
" " 527 to 528 1/2 to 529	2.10	2.40c
" " 529 to 530 1/2 to 531	2.10	2.40c
" " 531 to 532 1/2 to 533	2.10	2.40c
" " 533 to 534 1/2 to 535	2.10	



THE AURORA VASE LAMP, No. 200.

The "AURORA"

SUPERIOR TO ANY OTHER LAMP

In its Wicking & Elevating Devices.

Easily Extinguished. Absolutely Non-Explosive. Unrivalled in Brilliancy and Volume of Light. Manufactured in Fount, Vase and Stand Styles.

Finished in Polished Brass, Bronze, Nickel or Japanese.

Takes the same Wick and Chimney as No. 2 Rochester.

SPECIAL PRICES QUOTED to JOBBERS and EXPORTERS.

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THE COLOSSUS LAMP.

The Climax of Illuminators: THE "COLOSSUS,"

Especially adapted for BILLIARD PARLORS, STORES, CHURCHES, RAILROAD STATIONS, BARBER SHOPS, HALLS, HOTELS, WAREHOUSES, FACTORIES, BASEMENTS, and other Large Areas.

The Actual Size of The "Colossus" is 4 times as large as cut.

And produces a Light equal to 4 Electric, Jumbo or Rochester Lamps.

We are also Manufacturers of THE "CLEVELAND" LAMP; THE "ORIENT" CLUSTER LAMP; NON-EXPLOSIVE LAMPS; STUDENT LAMPS; RAILROAD LAMPS; HARVEY BURNERS; GAS FIXTURES, and other Specialties in Brass or Bronze.

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CLEVELAND, OHIO, U.S.A.

SCREW DRIVERS.
 Douglas Mfg. Co. dis 50kto 5
 Diston's. dis 45 5
 Cowlin Mfg. Co. dis 50kto 5
 Stanley Rule & Level Co. s. Var. Hds. dis 60 5
 Stanley Rule & Level Co. s. Black Hds. dis 50 5
 Hatchet. dis 35 5
 Clark's Patent. dis 25 5
 Shephardson. dis 25 5

SPOKE TRIMMERS.
 Bonney's. dis 20, dis 50 5
 Stearns. dis 50 5
 Ives. dis 50kto 5
 No. 1, \$15; No. 2, \$10; No. 3, \$8
 Douglas. dis 20, dis 50 5

SILVER PLATED WARE.
 Wm. Rogers Manf. Co. dis 50kto 5
 Holmes, Booth & Hayden. dis 50kto 5
 Wallace's Steel Silver Plated. dis 50kto 5
 Rogers Bros 1847. dis 50kto 5
 C. Rogers & Bro. dis 50kto 5

SCREWS.
 Standard new list, Feb. 15.
 Flat Head Bright. 70 5
 Round Head Bright. 65 5
 Flat Head Brass. 65 5
 Round Head Brass. 65 5
 Flat Head Blued (add 5¢ to net). 70 5
 Brass and Silver Capped. 40 5
 Japanned Flat Head. 65 5
 Coach, Patent Gimlet Point. dis 60 5
 Coach, Common or Lag. dis 70 5
 Bed. dis 25 5
 Machine, Flat Head, Iron. dis 55 5
 Machine, Round Head, Iron. dis 50 5
 Bench, Iron. dis 55 5
 Bench, Wood, Beach. dis 50 5
 Bench, Wood, Hickory. dis 50 5
 Hand, Wood. dis 50 5
 Hand Rail, Sargent's. dis 60 5
 Hand Rail, Humason, Beckley & Co. s. dis 40 5
 Hand Rail, Am. Screw Co., list Jan. 1, '81. dis 50 5
 Jack (Wilson's). dis 25 5

SCREEN FRAMES AND MIXTURES.
 Standard Window Screens No. 1, \$10; No. 2, \$15; No. 3, \$20; No. 4, \$25; No. 5, \$30; No. 6, \$35; No. 7, \$40; No. 8, \$45; No. 9, \$50; No. 10, \$55; No. 11, \$60; No. 12, \$65; No. 13, \$70; No. 14, \$75; No. 15, \$80; No. 16, \$85; No. 17, \$90; No. 18, \$95; No. 19, \$100; No. 20, \$105; No. 21, \$110; No. 22, \$115; No. 23, \$120; No. 24, \$125; No. 25, \$130; No. 26, \$135; No. 27, \$140; No. 28, \$145; No. 29, \$150; No. 30, \$155; No. 31, \$160; No. 32, \$165; No. 33, \$170; No. 34, \$175; No. 35, \$180; No. 36, \$185; No. 37, \$190; No. 38, \$195; No. 39, \$200; No. 40, \$205; No. 41, \$210; No. 42, \$215; No. 43, \$220; No. 44, \$225; No. 45, \$230; No. 46, \$235; No. 47, \$240; No. 48, \$245; No. 49, \$250; No. 50, \$255; No. 51, \$260; No. 52, \$265; No. 53, \$270; No. 54, \$275; No. 55, \$280; No. 56, \$285; No. 57, \$290; No. 58, \$295; No. 59, \$300; No. 60, \$305; No. 61, \$310; No. 62, \$315; No. 63, \$320; No. 64, \$325; No. 65, \$330; No. 66, \$335; No. 67, \$340; No. 68, \$345; No. 69, \$350; No. 70, \$355; No. 71, \$360; No. 72, \$365; No. 73, \$370; No. 74, \$375; No. 75, \$380; No. 76, \$385; No. 77, \$390; No. 78, \$395; No. 79, \$400; No. 80, \$405; No. 81, \$410; No. 82, \$415; No. 83, \$420; No. 84, \$425; No. 85, \$430; No. 86, \$435; No. 87, \$440; No. 88, \$445; No. 89, \$450; No. 90, \$455; No. 91, \$460; No. 92, \$465; No. 93, \$470; No. 94, \$475; No. 95, \$480; No. 96, \$485; No. 97, \$490; No. 98, \$495; No. 99, \$500; No. 100, \$505; No. 101, \$510; No. 102, \$515; No. 103, \$520; No. 104, \$525; No. 105, \$530; No. 106, \$535; No. 107, \$540; No. 108, \$545; No. 109, \$550; No. 110, \$555; No. 111, \$560; No. 112, \$565; No. 113, \$570; No. 114, \$575; No. 115, \$580; No. 116, \$585; No. 117, \$590; No. 118, \$595; No. 119, \$600; No. 120, \$605; No. 121, \$610; No. 122, \$615; No. 123, \$620; No. 124, \$625; No. 125, \$630; No. 126, \$635; No. 127, \$640; No. 128, \$645; No. 129, \$650; No. 130, \$655; No. 131, \$660; No. 132, \$665; No. 133, \$670; No. 134, \$675; No. 135, \$680; No. 136, \$685; No. 137, \$690; No. 138, \$695; No. 139, \$700; No. 140, \$705; No. 141, \$710; No. 142, \$715; No. 143, \$720; No. 144, \$725; No. 145, \$730; No. 146, \$735; No. 147, \$740; No. 148, \$745; No. 149, \$750; No. 150, \$755; No. 151, \$760; No. 152, \$765; No. 153, \$770; No. 154, \$775; No. 155, \$780; No. 156, \$785; No. 157, \$790; No. 158, \$795; No. 159, \$800; No. 160, \$805; No. 161, \$810; No. 162, \$815; No. 163, \$820; No. 164, \$825; No. 165, \$830; No. 166, \$835; No. 167, \$840; No. 168, \$845; No. 169, \$850; No. 170, \$855; No. 171, \$860; No. 172, \$865; No. 173, \$870; No. 174, \$875; No. 175, \$880; No. 176, \$885; No. 177, \$890; No. 178, \$895; No. 179, \$900; No. 180, \$905; No. 181, \$910; No. 182, \$915; No. 183, \$920; No. 184, \$925; No. 185, \$930; No. 186, \$935; No. 187, \$940; No. 188, \$945; No. 189, \$950; No. 190, \$955; No. 191, \$960; No. 192, \$965; No. 193, \$970; No. 194, \$975; No. 195, \$980; No. 196, \$985; No. 197, \$990; No. 198, \$995; No. 199, \$1000; No. 200, \$1005; No. 201, \$1010; No. 202, \$1015; No. 203, \$1020; No. 204, \$1025; No. 205, \$1030; No. 206, \$1035; No. 207, \$1040; No. 208, \$1045; No. 209, \$1050; No. 210, \$1055; No. 211, \$1060; No. 212, \$1065; No. 213, \$1070; No. 214, \$1075; No. 215, \$1080; No. 216, \$1085; No. 217, \$1090; No. 218, \$1095; No. 219, \$1100; No. 220, \$1105; No. 221, \$1110; No. 222, \$1115; No. 223, \$1120; No. 224, \$1125; No. 225, \$1130; No. 226, \$1135; No. 227, \$1140; No. 228, \$1145; No. 229, \$1150; No. 230, \$1155; No. 231, \$1160; No. 232, \$1165; No. 233, \$1170; No. 234, \$1175; No. 235, \$1180; No. 236, \$1185; No. 237, \$1190; No. 238, \$1195; No. 239, \$1200; No. 240, \$1205; No. 241, \$1210; No. 242, \$1215; No. 243, \$1220; No. 244, \$1225; No. 245, \$1230; No. 246, \$1235; No. 247, \$1240; No. 248, \$1245; No. 249, \$1250; No. 250, \$1255; No. 251, \$1260; No. 252, \$1265; No. 253, \$1270; No. 254, \$1275; 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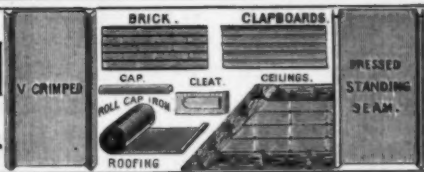
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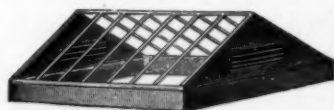
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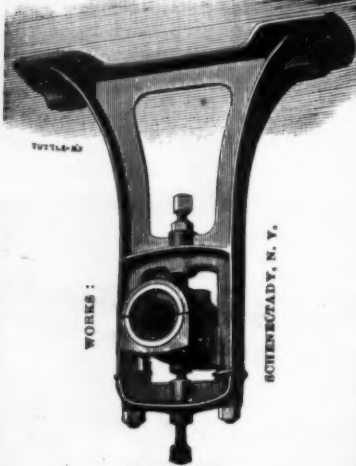
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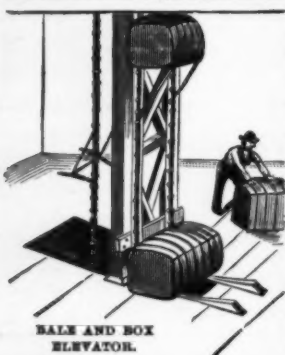


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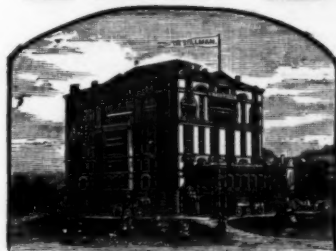
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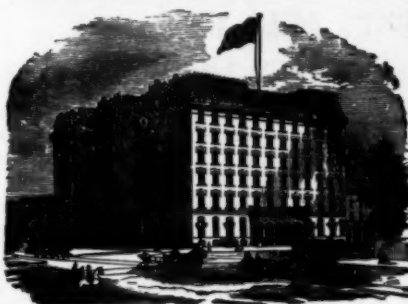
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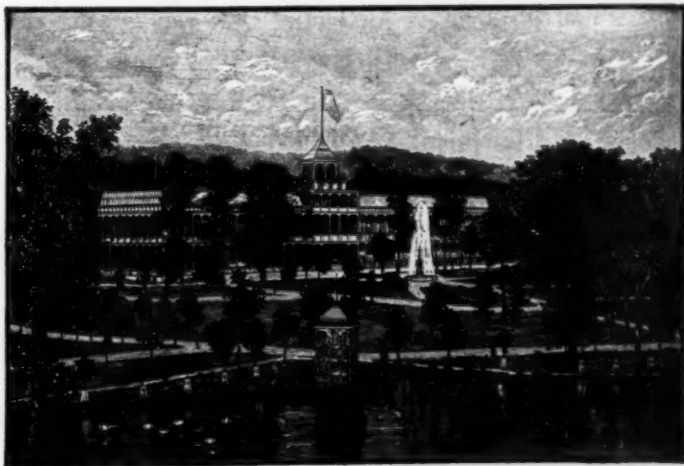
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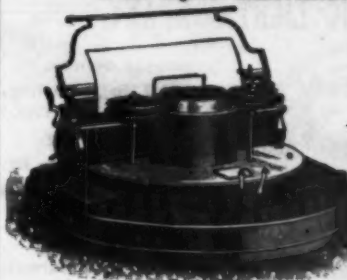
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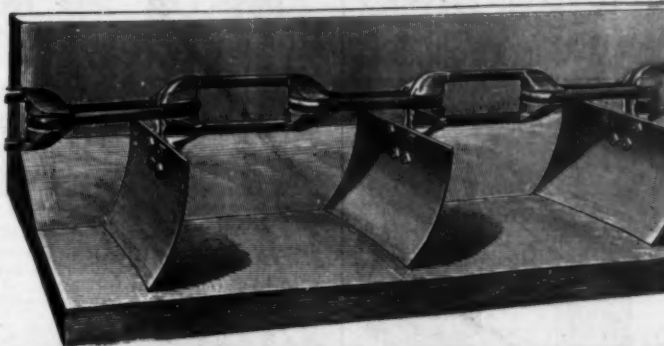


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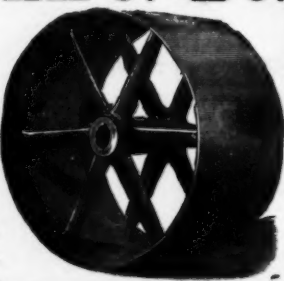
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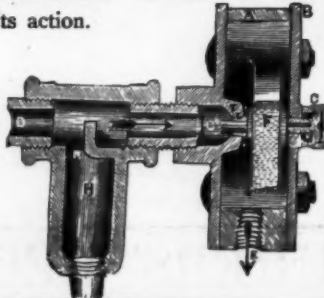
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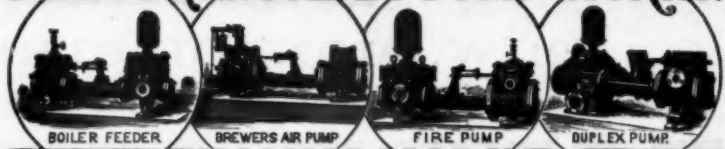
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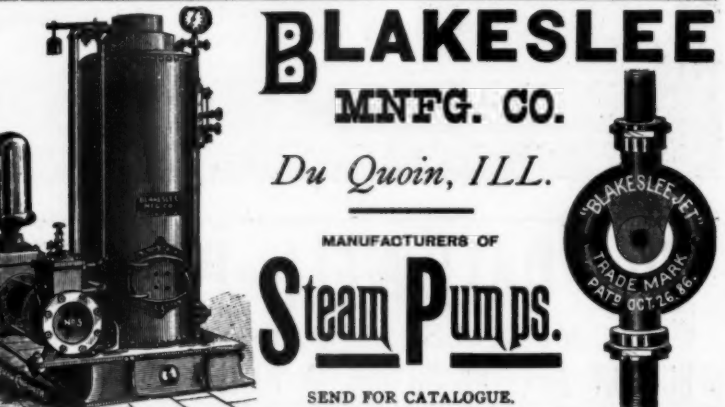
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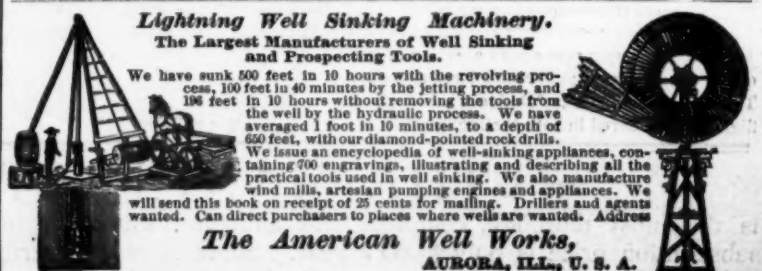
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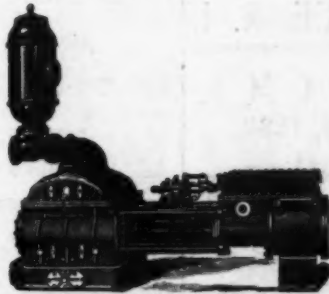
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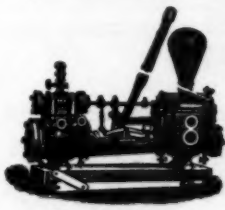
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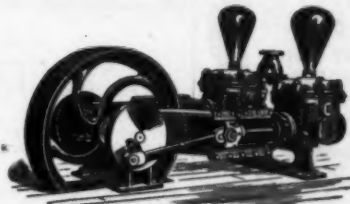
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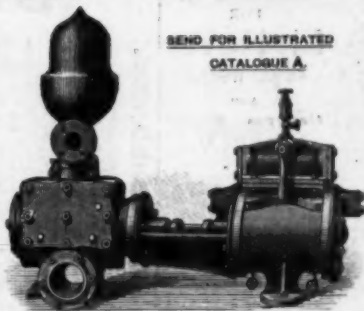
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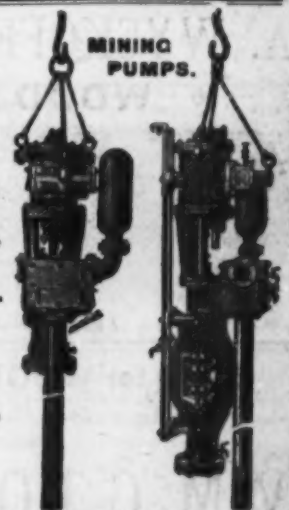
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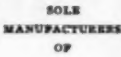
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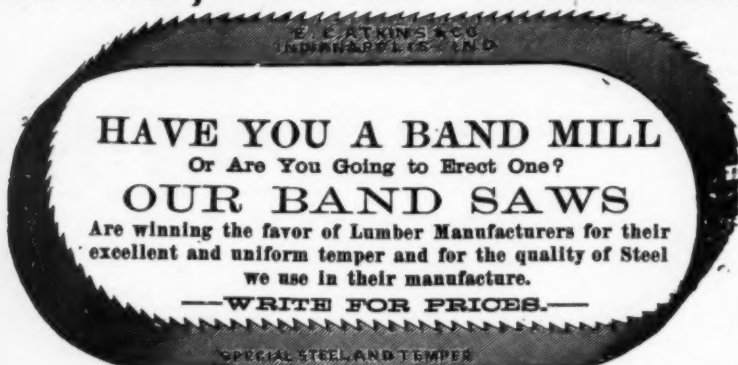
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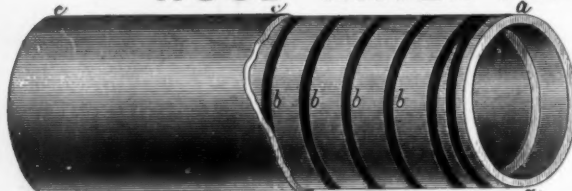
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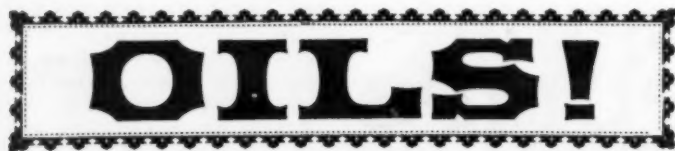
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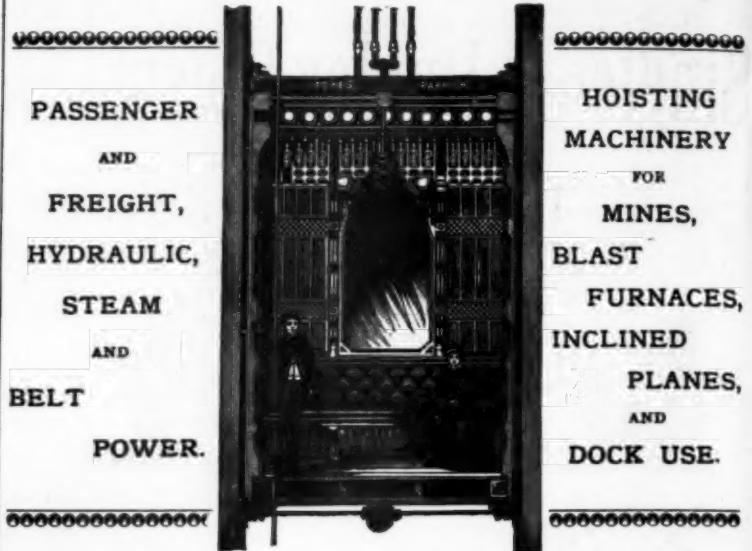
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